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ILLINOIS HISTORICAL SURVEY



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INDUSTRIAL RESOURCES SURVEY of METROPOLITAN PEORIA

PEORIA, ILLINOIS

ASSOCIATION OF COMMERCE
307 First National Bank Building

Acknowledgments
History
Geographic Location
Population
Markets for Local
 Manufacturing Production
Power and Fuel
Industrial Development
Labor Market
Water Supply
Transportation
Living Costs and Standards
Construction and Real Estate

VOLUME 1



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ACKNOWLEDGEMENTS

When it comes time to make proper acknowledgements to contributors to a community study such as this, it appears that most of the community participated in some way in its making. This is of course something of a testimonial to the community on its awareness of the problem at hand and the need for a solution. From its inception, the success of this survey has depended on the co-operation of a great number of individuals and the organizations they represent.

The report was conceived by the Industrial Development Committee of the Peoria Association of Commerce early in 1954. The Association's President at that time was Mr. Wesley Heppard. The Committee was headed by Mr. George Wasem. Mr. Melvin Brown, the Manager of the Industrial Development Council has worked very closely with the authors throughout the study and provided invaluable aid, both in pointing up information sources and securing local information. Many officials of business, industry and government, have made generous contributions of time, information and ideas. The measure of their contributions is best indicated by the completeness of the various individual phases of the report.

Although it is impossible to personally acknowledge all participants in this work, there are a number of people who through making a direct written contribution, a review of one of the author's work, or by extending a helping hand far beyond the call of duty, require special recognition.

Cooperating in the actual writing of the report was Mr. Lee Kraus of the Greater Peoria Sanitary District whose contribution is included in the chapter on Geographic Location. The chapter on Electric Power and Fuels is taken from a report submitted by Mr. Harry Feltenstein of the Central Illinois Light Company, who, incidently, provided much else in the way of survey techniques and at times much needed moral support. Aid in reviewing and commenting on completed sections of the survey were given by Mr. W. J. Kelly of Caterpillar Tractor Company; Dr. Daniel Scheinman, a Peoria Labor Relations Consultant; Dr. Max Suter of the Illinois State Water Survey, Mr. Joseph Sudow, a Peoria attorney and Mr. Patrick Murphy, of the U. S. Corps of Engineers. Mr. Jacob Dumelle of the City Manager's staff has given invaluable assistance on material concerning the City of Peoria. Messrs. Dale Freeburg and Frank Little, purchasing agents for local industrial companys, contributed much to the design of a material procurement questionnaire used in the survey. Dr. J. H. Burgey of Bradley University's Geography Department, helped considerably in the planning phase of the survey, as did Dr. W. G. Pinnell of the University of Indiana's School of Business. Miss Irene Morrow and Mr. Frank Chase, Reference Librarians of the Bradley University and the Peoria Public Libraries, respectively made the work of gather-

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The actual survey team was composed of Bradley University faculty members and assistants. The problem was recognized as an inter-disciplinary one and the team members were chosen on this basis. Dr. Kalman Goldberg of the Department of Economics prepared the chapters on the Labor Force and Legislation. Dr. Duane Hill, now of the Department of Government at Omaha University, wrote the chapter on Government. The remaining chapters were prepared by members of the Industrial Engineering Department; Mr. L. J. Fletcher, Jr., a staff member; Mr. John Price, a staff assistant; and myself.

Appreciation for the typing and editing must go to a number of people: Miss Kay Fouts, who did the lions share, Mrs. Virginia Parrett, Miss Mary Kissel, and finally Mrs. Jenny Fletcher and my wife, Dolores, who together operated under the most adverse circumstances.

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Finally, a repeat expression of deep gratitude to my wife, with whom I shared many a working midnight lamp this fall.

Francis C. Mergen

INTRODUCTION

Records of almost 100 years ago, show that Peorians even at that time demonstrated an active concern with the problem of urban development. Certainly one of the first Industrial Development surveys in the State of Illinois concerned the City of Peoria. It was prepared and published by the Peoria Transcript Newspaper in 1859. The report has all the basic elements that continue to be regarded as necessary criteria for measuring commercial and industrial activity, population and employment, types of industries, transportation facilities, civic development, etc.

Although perhaps not completely objective in approach, an excerpt from the introduction to the "Descriptive Account of the City of Peoria" does provide an interesting commentary on the times and the factors of location that were felt most important then:

"The town is one of the healthiest in the west. It is not subject to epidemics and the fever. Ague which prevents many eastern people from emigrating to a new country, is scarcely known here except in name.

It can be asserted without exaggeration, no city in Illinois or in the entire west can present greater attraction in the way of nature scenery than Peoria . . . This is admitted on all hands, by strangers visiting Peoria and by the inhabitants of rival cities who admit no more than they are actually forced to do.

Its advantage as a place of business and home may be gleaned from the following pages."

The conditions that motivated this present study are obviously neither unique in terms of time or location. An urban community owes its existence to the fact that it is a center of the production and exchange of goods and services. A concern with the economic health of a city--the dynamic forces that cause growth was important to early settlers. They are far more important in the complex economic structure today, and as a result of the advances in the science and art of industry as well as medicine, are less dependent on the physiological health of the location.

The objectives of this study are little different than those of its predecessors. The first is to provide a documentary background for the promotion of desirable Industrial Development in the area.

The second is to provide a compass for indicating the possible direction of this development.

The emphasis in this survey has been in attempting to achieve its first objective. The compass is provided to be sure, but with the reminder that much more than a compass is needed to arrive at a destination. The first step must be made and

the succeeding sure and steady. This is to say that the study is more descriptive than analytic. The facts are here, their use as a compass is, in most cases, left to the reader.

METHODS OF STUDY: A variety of sources have been tapped for the information included in this study. The major source of information was published material, principally that printed by various agencies of national, state and local governments. Allied to this source was that of unpublished reports, charts, and mimeographed materials. Considerable information was obtained through personal interviews. Finally, an important source of information was the replies to questionnaires designed specifically for this survey; one concerned with the labor force and the other with industrial purchases.

The geographic area included within the study corresponded to that in the Bureau of Census' definition of the Peoria Standard Metropolitan Area. This includes the entire counties of both Peoria and Tazewell.

There is some confusion resulting from different definitions of the term "Standard Metropolitan Area" by the Bureau of Census' different departments. The "Standard Metropolitan Area" as used in the 1950 Census of Population is defined as: "A county or group of contiguous counties which contain at least one city of 50,000 or more. In addition to the county containing such a city, contiguous counties are included in a Standard Metropolitan Area if according to certain criteria, they are essentially metropolitan in character and socially and economically integrated with the central city." There are 168 urban areas in the United States which meet this test. The 1947 Census of Manufacturing superimposes a minimum manufacturing employment requirement on this definition. A "Standard Metropolitan Area" here is defined to be: "an area which includes at least one city of 50,000 or more; the area as a whole must have a total population of at least 100,000, and employ at least 40,000 people in manufacturing industry." The criteria of integration with the area surrounding the county in which the city is located is the same as in the above definition. This definition is more restrictive and there are but 53 areas in the nation that are classified as Standard Metropolitan Areas under this measure. Peoria is one of the 53. The need for this distinction exists principally in reference to the chapter on markets, where both meanings are used.

In addition to the above definitions, the following geographic uses of the word Peoria bear emphasizing.

"PEORIA TRADING AREA"-- a term used in the Bureau of Census' 1950 Census of Business which in this case includes eleven counties bordering Peoria County (see page for details). Statistics referring to this term will represent the twelve county total.

"PEORIA STANDARD METROPOLITAN AREA"*--the total area included in both Tazewell and Peoria counties. Thus when statistics are provided or a general statement made using this term, reference will be made to the total of both counties.

* Or abridged form "Peoria Metropolitan Area."

"PEORIA COUNTY"-- The civil division of the county including the City of Peoria, unless otherwise noted. Statistics here will be the total for all the area included within the county boundaries.

"CITY OF PEORIA"-- The incorporated city, representing all the activity and geography lying within the area described by the corporate limits of the city.

An attempt has been made in treating the various aspects of this survey to provide information for a minimum of the two-county area. In some cases this has been impossible. A completely detailed two-county coverage, for example, on such items as civic and social activities and community services, was not made. Coverage on a basis of less than the two county area was made for any one or more of the following reasons:

1. The alternative was the use of statistics for activities in large areas that included portions both within and out of the two-county boundary.
2. The data was either unobtainable or its acquisition unfeasible.
3. The completeness of the report was not diminished by an omission of the data, i.e. either the material which was available was felt to be typical of the entire area or the material available covered the most significant portion in the two-county area of the activity being measured.

In all events an attempt has been made to clearly indicate the precise geographic frame of reference within which each specific discussion is laid.

In all cases, information of most recent origin has been used. However, because of recent curtailed activity in the government-data-gathering agencies, it has been necessary to rely on some information that is far from current. Fortunately, in those cases in which, for example it was necessary to rely on census material (1947-1950), it was possible to reduce the results to their elementary structural form, and thus to express a condition or pattern which probably has not changed substantially since then. The "value added" concept of measuring manufacturing activity is an illustration of this. Whereas the absolute values of the 1947 figure are of little use now, the pattern represented by the proportion of the metropolitan areas total "value added" contributed by the various types of industries still has current application. In other words, whereas there may be rather violent fluctuations in business activities within a short span of years, it is less likely that the basic industrial or commercial structure of the community will radically change within this time.

In a survey of this sort, it is essential to point out the features of the community that are unique. It is as important to know those factors that are uniquely bad as those that are uniquely good. Both have a place in the promotion of industrial expansion and it is only through an investigation of both that the direction of expansion is completely defined.

With this objective in mind, certain other mid-west cities were selected with which to compare the Peoria Metropolitan Area. The criteria for inclusion in

this comparison were similarity of form or size of the city. All of the metropolitan areas are in the same population range. Most have an industrial structure somewhat different from that of Peoria, although one (South Bend, Indiana) was intentionally chosen because it has an industrial concentration condition quite similar to Peoria's.

This study is oriented toward the need of providing a tool which can be used to further industrial expansion. A careful study of the data included, points up a number of problems that should be resolved in order to provide an environment within which industrial development will most naturally flourish.

One of these problems is the topographic nature of the land in Peoria County which offers a natural barrier to a very substantial amount of industrial expansion. The quality of the land that has been zoned for industrial purposes in this county (see Kickapoo Creek maps pages 78,79 as an illustration) indicate at the very least, a negative attitude toward industrial expansion on the part of many residents. It appears that an agency should be established to plan for more effective utilization of land. An agency made up of men with enough imagination to adequately dramatize the need for expansion and with sufficient vigor to implement their recommendations.

The water supply of Peoria County is, of course, another element that has not in the past been conducive to Industrial Development. This problem has been severe enough to begin to receive the attention it requires, with results that are at least promising.

In both Tazewell and Peoria Counties, the sanitary facilities generally require expansion before they would be capable of supporting much industrial development.

These are but illustrations of the observations that are readily apparent from the facts contained in the report. The important feature that these conditions have in common is that they all lie within the practical realm of correction.

It is important for any community to recognize its natural limitations in the type of industries, or the extent of industrial expansion that it can support and thereby distinguish between what it can and cannot practically accomplish. It is imperative however, that this same community vigorously attack those obstacles that lie in the path of practical accomplishment.

The Peoria Metropolitan Area has features, which are both assets and liabilities to future industrial expansion. The assets are apparent and they are substantial. The liabilities should be made apparent so they can be made quite unsubstantial.

CHAPTER I

HISTORICAL SKETCH



HISTORY OF PEORIA AND TAZEWELL COUNTIES

The first recorded visit by white men to this area was in the summer of 1673 when Pere Marquette and Sieur Joliet stopped here for a short time.

The first construction here by white men was the erection of Fort Creve Coeur on the east bank of the Illinois River across from the present location of the City of Peoria. This Fort was built in 1679 by Robert de La Salle and his men but was occupied by them for only a short time.

Twenty-one years after the erection of Fort Creve Coeur, an Englishman, Dr. Daniel Coxe stopped here briefly. At this time, one of the seven Indian tribes occupying this vicinity was called Peorias.

After the visit by Dr. Coxe, over eighty years passed before Peoria was to be again visited by any sizable group of white men. In this era French missionaries continued to attempt to minister to the Indians of this area but there was considerable unrest among the tribes and many of the churchmen were slain.

In 1779, Hypolite Maillet moved a small colony into this vicinity and created the first settlement of any duration. This settlement existed for over thirty years until it was substantially destroyed in 1813 in a military engagement between Indians and the Illinois Rangers who had been organized when the Indians in this area again began showing signs of hostility.

After removal of the French, another detachment of Rangers returned to Peoria where they built Fort Clark. Thus began the present settlement of Peoria. Six years after construction of the Fort in 1819, seven men from near St. Louis arrived in Peoria and pitched their tents adjacent to the pickets of Fort Clark. Thereafter there was a steady inflow of a few families every year.

Meanwhile permanent white settlers were also immigrating into the area now Tazewell County as settlement of the state of Illinois gradually moved northward.

By 1825, when Peoria was organized as a county with Peoria as the county seat, there were 120 taxable inhabitants in the entire territory of the state of Illinois north of what is now the southern boundaries of Tazewell and Peoria Counties. Of this 120, forty lived in the present boundaries of Peoria County and fifty-four lived in Tazewell County. Tazewell was organized as a County four years later in 1849 with Pekin as the County seat.

Peoria was laid out as a town and named in 1826; however, because of land title difficulties it was actually not incorporated as a town until 1835.

At the time of Peoria's incorporation as a town, there was in existence a public school, a church, a newspaper, and a public water supply system. River transportation had developed so that within a few more years in 1844 there were seventeen regular packets plying on the Illinois River. This same year saw the final

reorganization of the community when it was incorporated as a city under the aldermanic form of government which it retained until 1953.

In 1849 the Illinois-Michigan Canal was opened, giving a considerable impetus to the development of both Peoria and Pekin. This was also the year that Pekin was incorporated under the aldermanic form of government which it retained until 1911.

The railroad came to Peoria in 1853 when the Peoria and Bureau Railroad was built between these points connecting with the Rock Island Railroad at Bureau which is about forty miles up river from Peoria. Six years later the first train steamed into Pekin at the completion of the Peoria, Pekin, and Jacksonville road.

Peoria and Tazewell Counties' industrial history reflects their rather unique natural advantages. The area soon became the center of a highly productive agricultural section of the country. There were rich deposits of fourth and sixth vein coal throughout the Counties. There was an ample supply of pure water readily accessible. Finally the Illinois River provided a natural transportation advantage.

Peoria's and Pekin's industrial origin was associated with the farm. Flour mills existed in both Counties as early as 1830, with much of the product being exported as far away as New Orleans.

The first commercial slaughter house was built in 1837 and farm implement manufacturing was established in Peoria in 1843 and in Pekin in 1849. The distilleries and breweries originated at about this same time.

Peoria and Pekin soon developed into important grain markets. The area, as it grew commercially, became a livestock trading center. The waste products of the distilleries were ideal for feed.

In the post Civil War period, both Pekin and Peoria developed rapidly. Under the influence of the "Cattle Feeders and Distillers Trust" a tremendous growth was made in the size of this industry. The effectiveness of this combine is indicated by the fact that between 1870 and 1890 the number of distilleries in Illinois dropped from 45 to 7 while the average output rose in value from \$175,300 to \$7,448,000 annually. The Trust was dissolved in 1900 in the era of the "trust-busting". Much progress was made in the latter part of the century in the development of municipal services and cultural institutions. It was during this time that the first public bridges were constructed over the Illinois River at Pekin and Peoria. Public buildings, libraries, high schools, elementary schools, municipal offices, post offices, hospitals, etc., were erected. Street lighting became a fact. City park facilities were developed, auditoriums and theaters were constructed. The "Street Railways" were laid out and by 1900 fairly well blanketed both cities.

In Peoria at the turn of the century, the farm implement industry had taken on large proportions. There were five manufacturers in this field, led by the Avery Manufacturing Company which, at one time, had a payroll in excess of 2,600 people. The implement industry gradually declined after the 1920's, but was supplanted by the manufacture of heavy earth-moving equipment, which would ultimately dominate the area.

In 1909 the Holt Manufacturing Company of Stockton, California, purchased the properties of the Colean Manufacturing Company in East Peoria. This was the beginning of the present Caterpillar Tractor Company, a firm eventually employing in excess of 21,000 people at its East Peoria location.

The R. G. LeTourneau Company, which was also originated in Stockton, California, came to Peoria in 1935, purchasing the site of the Avery Manufacturing Company, and began production of rubber tire mounted earth-moving equipment. The Peoria plant, along with other LeTourneau properties, was purchased by Westinghouse Air Brake in 1953. The company was re-named LeTourneau-Westinghouse, and continued producing earth-moving equipment.

Altorfer Brothers, producers of kitchen appliances, principally washing machines, was founded in 1909 in nearby Roanoke. The manufacturing activities were moved to East Peoria when the present plant was built in 1918. Employment here is in the neighborhood of 1,000. This concern was purchased by Nash-Kelvinator Corporation in 1952, maintaining production of substantially the same line.

Keystone Steel & Wire Company was founded in 1889, moving to its present location at Bartonville in 1901. Through the years has evolved a completely integrated steel and wire mill employing between two and three thousand people.

So much for historical examples of the metals industries in Peoria.

The brewing and distilling business has continued to flourish during this century, except in the prohibition era, perhaps being best personified in the cases of Premier-Pabst Corporation and Hiram Walker & Sons Distillery.

Premier-Pabst constructed a plant in what is now Peoria Heights in 1934 capable of producing 500,000 barrels of beer annually. Capacity has since been increased three fold. At the same time Hiram Walker & Sons erected a \$12,000,000 plant in Peoria which was to become the largest distillery in the world. National Distillers Products Corporation and Century Distilling Company also have built and operated plants since the repeal of the 18th Amendment.

Meanwhile, in Pekin, Corn Products Refining Company had constructed a plant in 1906. Its expansion has been such that today it is the second largest corn grinding plant in the world, employing about 1,250 people.

The 1930's also saw the rejuvenation of the distilling industry in Pekin. The American Distillery started into operation on whiskey production in 1933. It

currently employs between 500 and 600 people.

The post World War I era saw the developments of airports, a Sanitary and Sewage-Disposal District, construction of a new bridge over the river at Peoria, a Waterway Terminal, and the establishment of three U. S. Housing Authority projects.

The United States Department of Agriculture in 1939-1940 erected at Peoria the Northern Regional Research Laboratory. This is one of four such units in the country under the direction of the Bureau of Agricultural and Industrial Chemistry. The Laboratory's function is the study and development of new and improved industrial uses of farm products.

World War II saw most of Peoria's industries devoting at least some of their facilities to war work.

In 1953, after functioning for many years under the aldermanic form of government, Peoria citizens voted into law a Council Manager system. Under its leadership an aggressive citizenry has done much to rectify that which was unsavory about the city. As a result of this activity Peoria received the Look Magazine - National Municipal League "All-American City....1953" Award, one of eleven such awards offered annually throughout the country.

It is fortunate to be able to bring up to date a historical sketch on such an optimistic note. The personality of an urban community is exemplified by the personality of her citizens. The Peoria area residents have lately demonstrated no little progressiveness. This tendency, coupled with a willingness to respond to qualified, responsible leadership, is certainly as important a "natural resource" as the city has to offer, and there are many as may be seen from the ensuing report.

Chapter I

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CHAPTER II

GEOGRAPHIC LOCATION



GEOGRAPHIC LOCATION

The pattern of the industrial fabric of any community is established by the nature of its resources. Some of these resources exist by virtue of the geographic location of the community. Others exist simply because they have been nurtured by the growth of the community itself.

Peoria lies on the Illinois River approximately equidistant from Chicago and St. Louis at an altitude of 488 feet. There are 156 highway miles between Chicago and Peoria, and 169 highway miles between St. Louis and Peoria.

The city has a land area of 12.9 square miles. However, the size of the metropolitan area under study is 1,292 square miles. This latter figure includes the two counties of Peoria and Tazewell.

The city of Peoria is located about 160 air miles northwest of the center of the United States population, a feature significant to retail marketing.

The dominant local geographic feature of the Peoria area is the Illinois River which originates in the northeastern part of the state where the Des Plaines and Kankakee Rivers join. The River flows from this point which is about 45 miles southwest of Chicago, in a southwesterly direction for 285 miles across the state emptying into the Mississippi River about 40 miles above St. Louis.

Steep bluffs border much of the Illinois River through Peoria and Tazewell Counties. Deposits from the tributary streams of the Illinois have resulted in the formation of a series of alluvial fans. These formations have been significant in determining the course of the River on its flood plain. The smaller fans east of Peoria Lake have made uneven inroads on the bluffs creating a scenic area in which many homes are built.

The large fan of "Ten Mile" Creek forces the River against the western bluffs at the "Narrows" just north of the city limits of Peoria leaving only a small strip on which a highway and the Rock Island right of way run.

North of the "Narrows" is another broad expanse of water called Upper Peoria Lake which measures up to one and three quarter miles wide.

On the southern limits of the city, Kickapoo Creek deposits carry the River back to the eastern side of the valley at Wesley in Tazewell County where the Peoria Lock and Dam are built.

Another distinctive feature of local economic importance is the series of sand and gravel terraces bordering the River.

The relatively level uplands on both sides of the River in Peoria and Tazewell Counties break into deep ravines which descend as much as 300 feet to the River. To the west of the city of Peoria there are also ravines and bluffs bordering the

Kickapoo Creek Valley which is from 150 to 200 feet lower than the surrounding area. *

Although land drainage in this area is good, the soil is not high in organic matter and nitrogen content. It is, however, well suited for the staple crops of corn and soy beans. (2) (See Bibliography, page 97.)

CLIMATE

The climatic characteristics of the Peoriarea are best revealed by a study of various meteorological data available.

The average annual rainfall for the state is shown in figure 1, indicating also the maximum, minimum, and averages for the city. The average annual rainfall for the city has within the last ten years had a maximum deviation from the mean of -6.17". This minimum occurred in 1953. (1 & 16) **

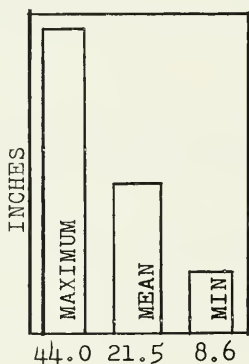
Snowfall data for the Peoriarea indicates a considerable variability. The data shown below indicates minimum annual fall of 8.6" which occurred in 1920-1921 and a maximum of 44.0" which occurred in 1925-1926.

ANNUAL SNOWFALL DATA FOR THE CITY OF PEORIA

69 year period to 1953

U. S. Weather Bureau

(includes snow, sleet & hail)



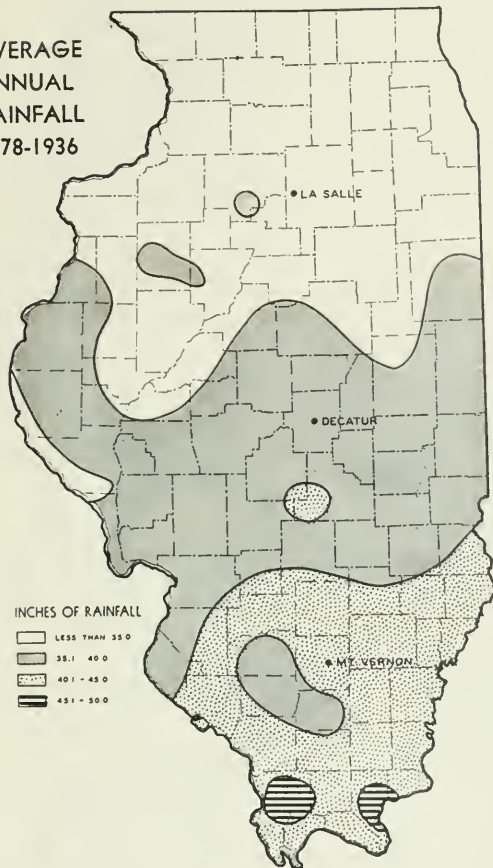
* According to the U. S. Department of Agriculture, the relative levelness of Peoria and Tazewell Counties is 38.0% and 42-4% respectively. These values are expressed as a per cent of total cropland available in each county.

** All climatological data in this report are from these two references.

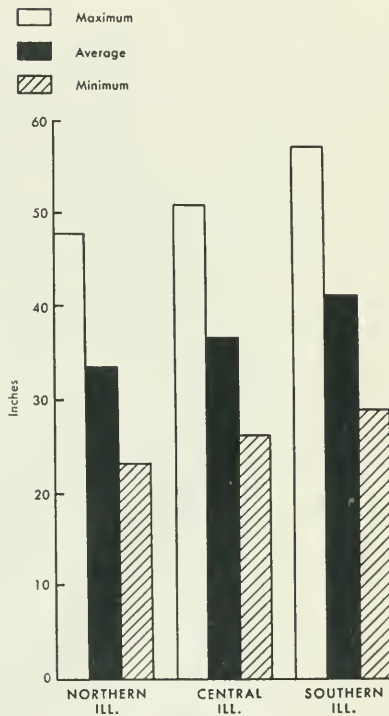
RAINFALL

U. S. WEATHER BUREAU

AVERAGE
ANNUAL
RAINFALL
1878-1936



ANNUAL RAINFALL
1890-1943



AVERAGE
DISTRIBUTION
OF RAINFALL
BY MONTHS

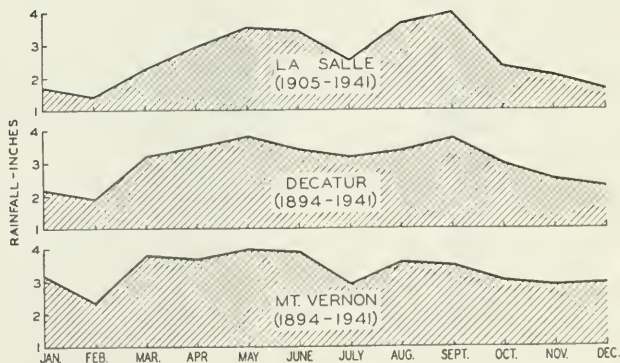


Figure 1

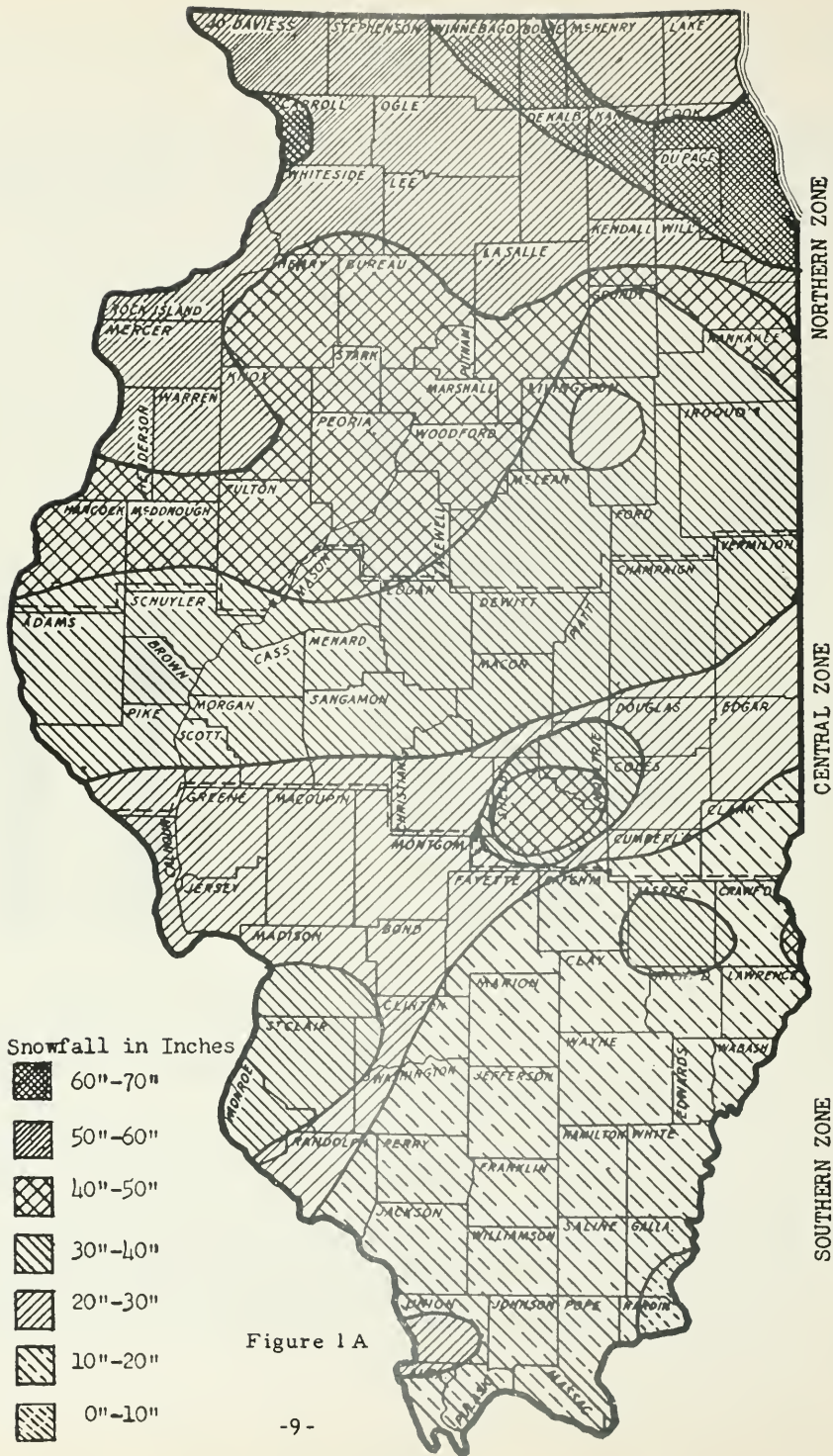
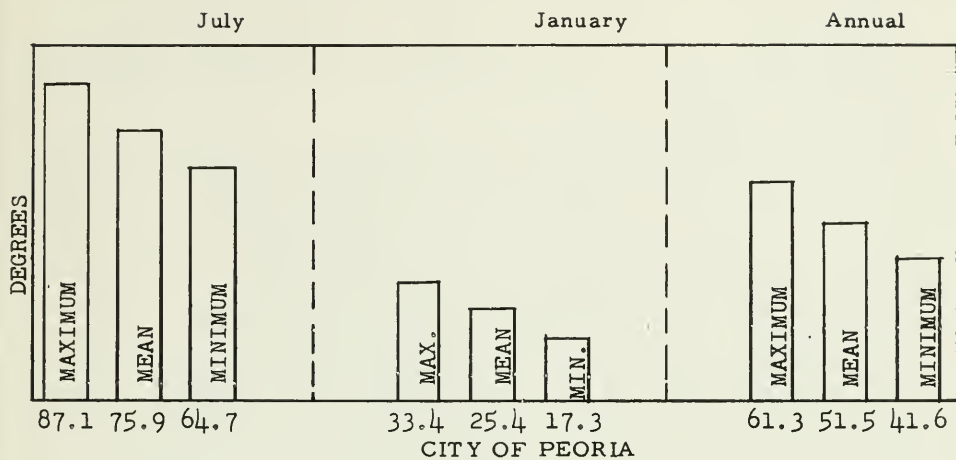


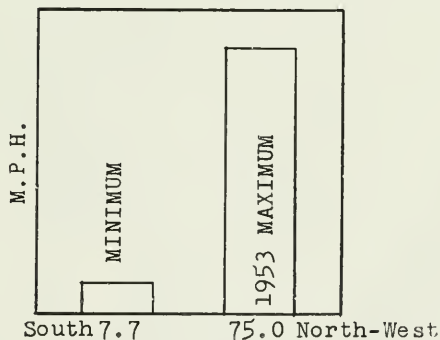
Figure 1A

AVERAGE TEMPERATURE DATA, 1900 - 1953



WIND AND RELATIVE HUMIDITY PEORIA

Based on 49 year history wind velocity



RELATIVE HUMIDITY MEAN

Values based on 36 years or longer

6:30 A. M.
83%

12:30 P. M.
61%

6:30 P. M.
67%

CONDITION OF SKY

Average number of days per year based on 49 year history
SUNRISE TO SUNSET

Clear
141

Partly Cloudy
105

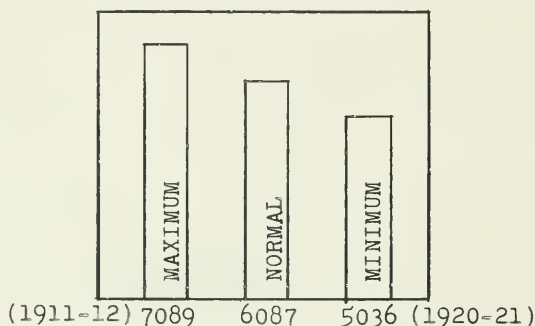
Cloudy
119

July in Peoria has historically been the warmest month of the year and January, the coldest.

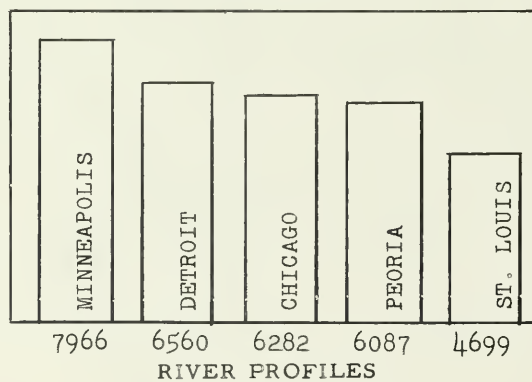
As a corollary index to the temperature characteristics of the area, the average length of the growing season is of some importance. The general picture on a statewide basis is shown in figure 2.

Another climatic characteristic of importance in determining manufacturing operational costs is the number of annual Degree Days which is a measure of the heating load.

SEASONAL DEGREE DAYS FOR THE CITY OF PEORIA, 1905 - 1953



COMPARISON OF PEORIA HEATING LOAD WITH THAT OF OTHER CITIES Normal values based on annual averages for 22 year period or longer.



As the Illinois River is perhaps the most significant local geographic feature, some study of its behavior is certainly in order.

The river serves a number of functions in this area: transportation, recreation, drainage, waste disposal, and perhaps eventually water supply. These facets of

GROWING SEASON
AVERAGE LENGTH

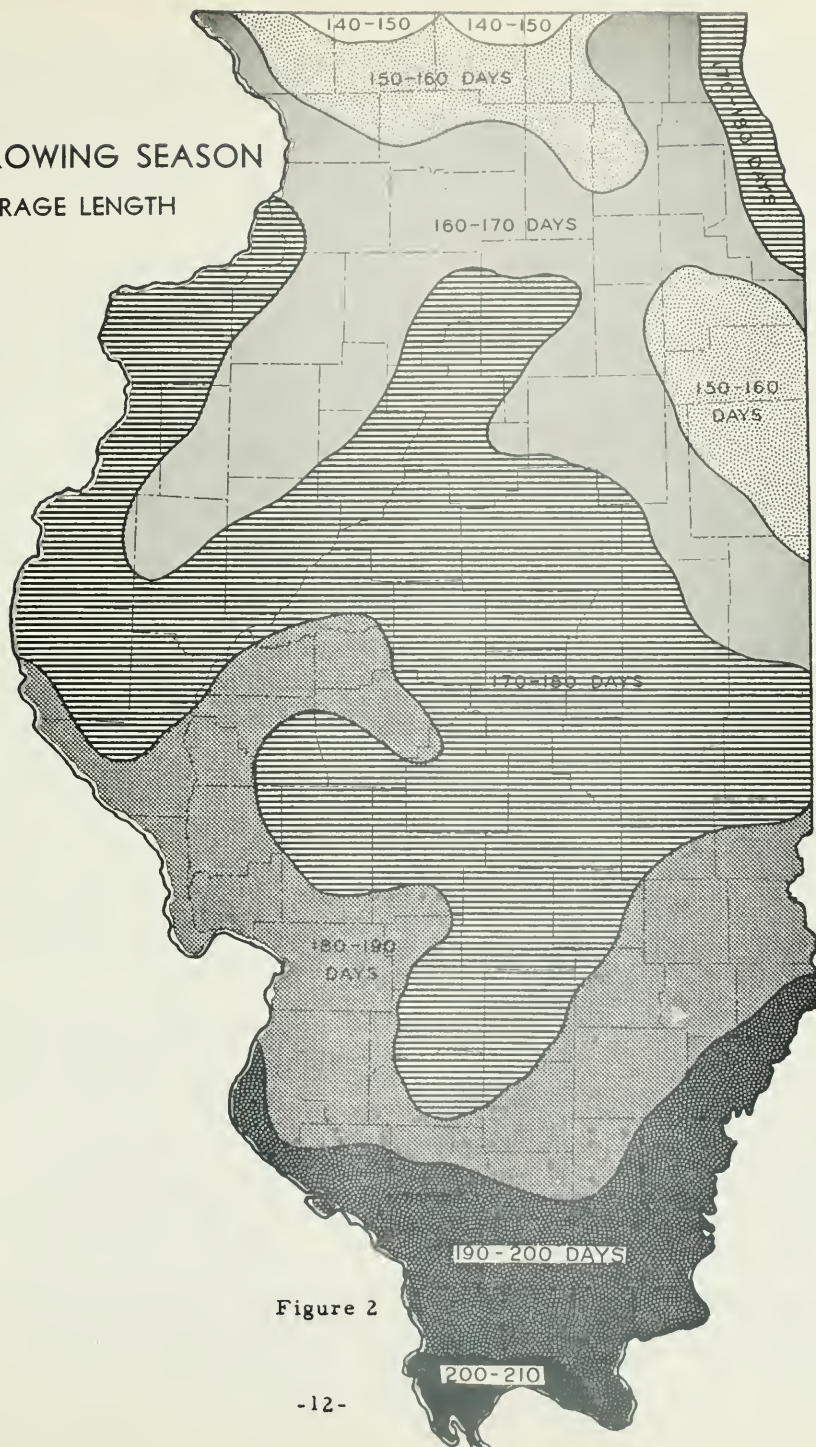


Figure 2

the river's character will be discussed in other sections of the report. It will suffice here to treat the characteristics of the river as it affects industrial sites.

For purposes of this sketch of river history, the criteria of behavior can be the high and low water levels. There have been nine major floods since the first recorded one in 1844.

A look at figure 3 showing high and low water profiles provides a composite picture of the river's behavior since 1844. It is quite apparent that the floods have been reaching successively higher stages since the recording began. This condition has been caused, not by an increase in the run off or discharge rate of the river itself, but rather by two situations associated with the development of land.

The first is that with the establishment of man-made systems for draining fields, swamps, and city area, the rate of storm water run off to the river is considerably increased, bringing tremendous surges of water to the river. The second is that under the state laws of 1900, land owners have been allowed to build levees which have had the effect of constricting the natural boundaries of the stream.

Drainage and levee districts have been organized under the laws of the state to reclaim bottom lands. Each district that has built a levee has shut off a portion of the natural flood flow channel, thus adding to the flow heights.

In recent years several projects aimed at flood control for the Peoria and Tazewell County Area have been completed. The effort has been principally directed toward the protection of East Peoria. The Farm Creek Project entailed the construction of a dam and channel to control the flow of water in this stream, which had previously been a major source of flood troubles to East Peoria. Coupled with this work was the recent completion of work on the levee along the Illinois River which provides maximum protection to East Peoria. The elevation of this levee is 463 feet, three feet above the recommended level and higher than any other levee in this area.

There is currently a comprehensive plan under study by the Corps of Engineers providing for flood control for this district. This plan proposes the construction of approximately fifteen retention reservoirs on various tributaries which flow into the Illinois River between Peoria and Beardstown.

Of immediate importance to the City of Peoria is the Kickapoo Creek reservoirs which would be constructed near Kickapoo, Illinois, about twelve miles northwest of Peoria. This would create a water conservation and flood control reservoir surrounding Jubilee State Park.

In addition to the behavior pattern of the Illinois River, figure 3 shows on the right hand side, the level of various features along the Peoria River front. This, of course, provides an index to the features susceptible to overflow.

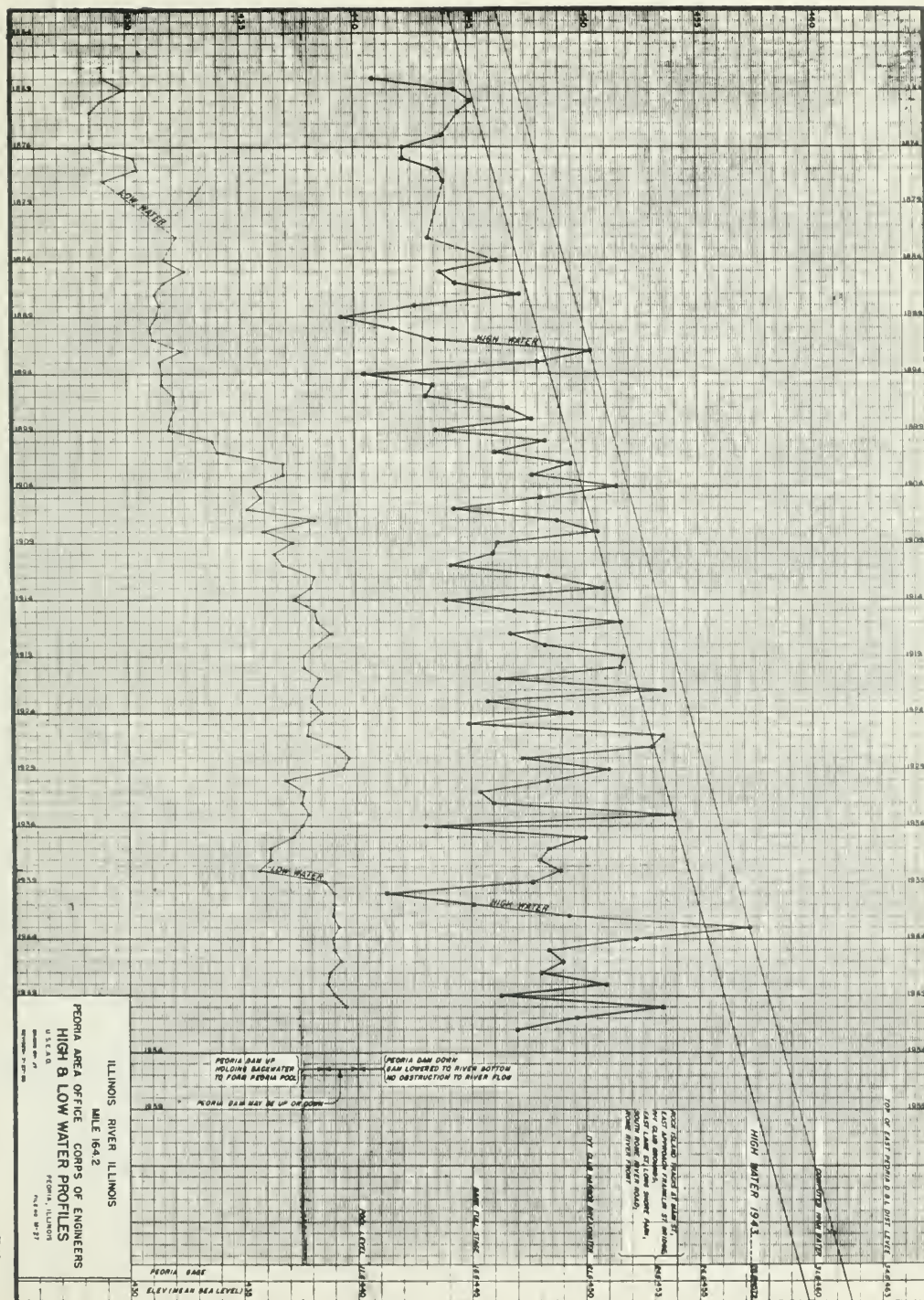


Figure 3

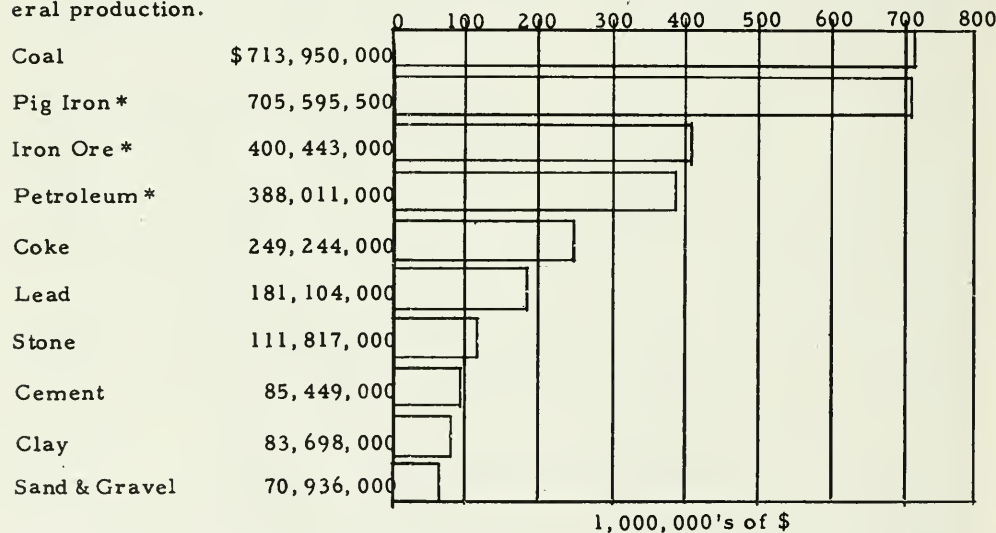
Special attention should be called to the protection level recommended by the Corps of Engineers for all river front building in this area. This is shown as the Computed High Water level, a value of 460 feet.

MINERAL RESOURCES

"The fortune of any city is conditioned largely by relation between its location and some of the dominating interests of its time and region. It is also clear that a city whose position makes it attractive for pursuit of a number of these interests is bound, in very truth, to have greatness thrust upon it." (10)

The Peoria area lies near the hub of the upper Mississippi Valley States (see figure 4), an area rich in mineral resources. Peoria's well-developed transportation facilities (see chapter 9 page 246) brings much of these resources within economic range of use. In 1953, the total value of the mineral resources produced in this region represent 15.8 per cent of the United States mineral wealth.

The chart below provides a comprehensive picture of the region's specific mineral production.



The accompanying maps show the location of the most important mineral deposits in the Upper Mississippi Valley States.

Some indication of the value of this natural treasure in the State of Illinois may be had from viewing figure 5 which shows the rank of Illinois as compared with its contiguous states. A detailed breakdown of the mineral production for Illinois is available in the Appendix, page 497.

* These figures based on regional average unit prices in the case of two states where these values were not listed.

VALUE OF MINERALS PRODUCED

1950

(thousands of dollars)



UPPER MISSISSIPPI VALLEY STATES

* For breakdown off Illinois Mineral Production, see Appendix p.

497.

Source; Minerals Year Book 1950

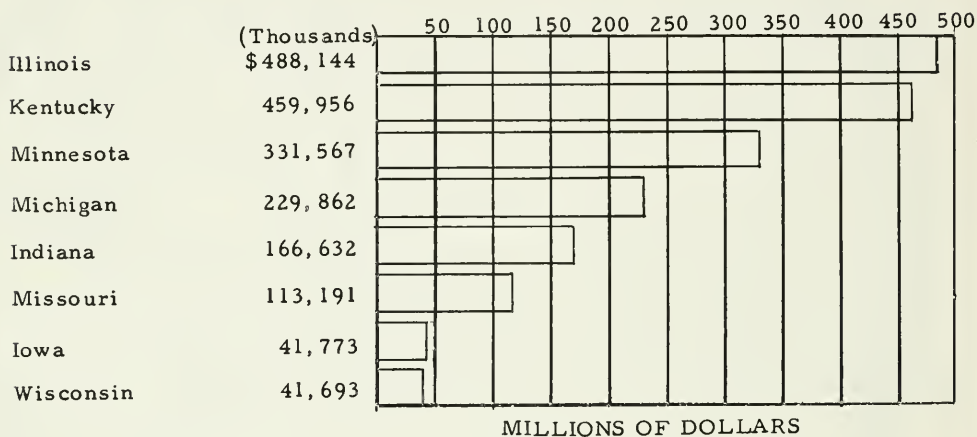
Figure 4

PRINCIPAL MINERALS

1950

United States	\$11,855,000,000
Upper Mississippi Valley States	1,872,818,000
Illinois	488,144,000

ILLINOIS AMONG THE UPPER MISSISSIPPI VALLEY STATES



STATE

PRINCIPAL MINERAL PRODUCED IN ORDER OF VALUE

Illinois	Coal, Petroleum, Stone, Cement
Kentucky	Coal, Petroleum, Natural Gas, Stone
Minnesota	Iron Ore, Sand and Gravel, Stone, Cement
Michigan	Iron Ore, Petroleum, Cement, Salt
Indiana	Coal, Petroleum, Cement, Stone
Missouri	Lead, Cement, Stone, Coal
Iowa	Cement, Stone, Coal, Sand and Gravel
Wisconsin	Stone, Sand and Gravel, Iron Ore, Cement

Figure 5

In 1952 there were \$486, 177, 000 worth of minerals mined in Illinois. In addition to this, the value of minerals processed in Illinois, although substantially mined somewhere else, was \$388, 484, 000. These include pig iron, coke and byproducts, slab zinc, and others. Of significance also is the fact that minerals and mineral products accounted for 52.8% of the revenue freight originating in Illinois in 1952. Thus the combined value of minerals produced and processed in Illinois in that year totals approximately \$875 million. No other state in the Upper Mississippi Valley has such a mineral heritage.

FUELS

COAL:

Coal is Illinois' most valuable single mineral resource. In 1952, 45, 753, 000 tons valued at \$186, 671, 000 were produced in Illinois. This state ranked fourth among the states in coal production accounting for ten per cent of the national output.

"Coal is not only, quantitatively, the state's most important mineral resource, it is for the long run at least, the most important of industrial fuels." (8)

Coal fields underlie almost all of the central and southern part of the state from the east boundary to the west (see figure 6).

The most important coal beds in this state are the Herrin No. 6, which constitute almost half of the estimated coal reserves in Illinois, Harrisburg No. 5, and La Salle No. 2. The total estimated mineable reserves for the state as of 1952 was 137, 329 million tons. (8)

The quality of coal in Illinois varies somewhat, generally having a higher grade in the southeast portion of the state.

The commercially important coal beds in Illinois analyze as follows: (See Table 1 on page 20).

Coking Qualities:

"In general it is assumed that all Illinois coals will coke if used soon after they are mined. Oxidation of Illinois coals rapidly reduces their coking capacity with greater effect on the lower ranking coals. In general only the coals in southern Illinois from Jefferson County southeast when properly prepared, are suitable in blends with eastern low volatile coals for the production of metallurgical coke." (8)

Coal in the Peoria area:

Within recent years Fulton County has grown to be the largest producer of coal of any of the counties in Illinois. Fulton County coal is quite satisfactory for

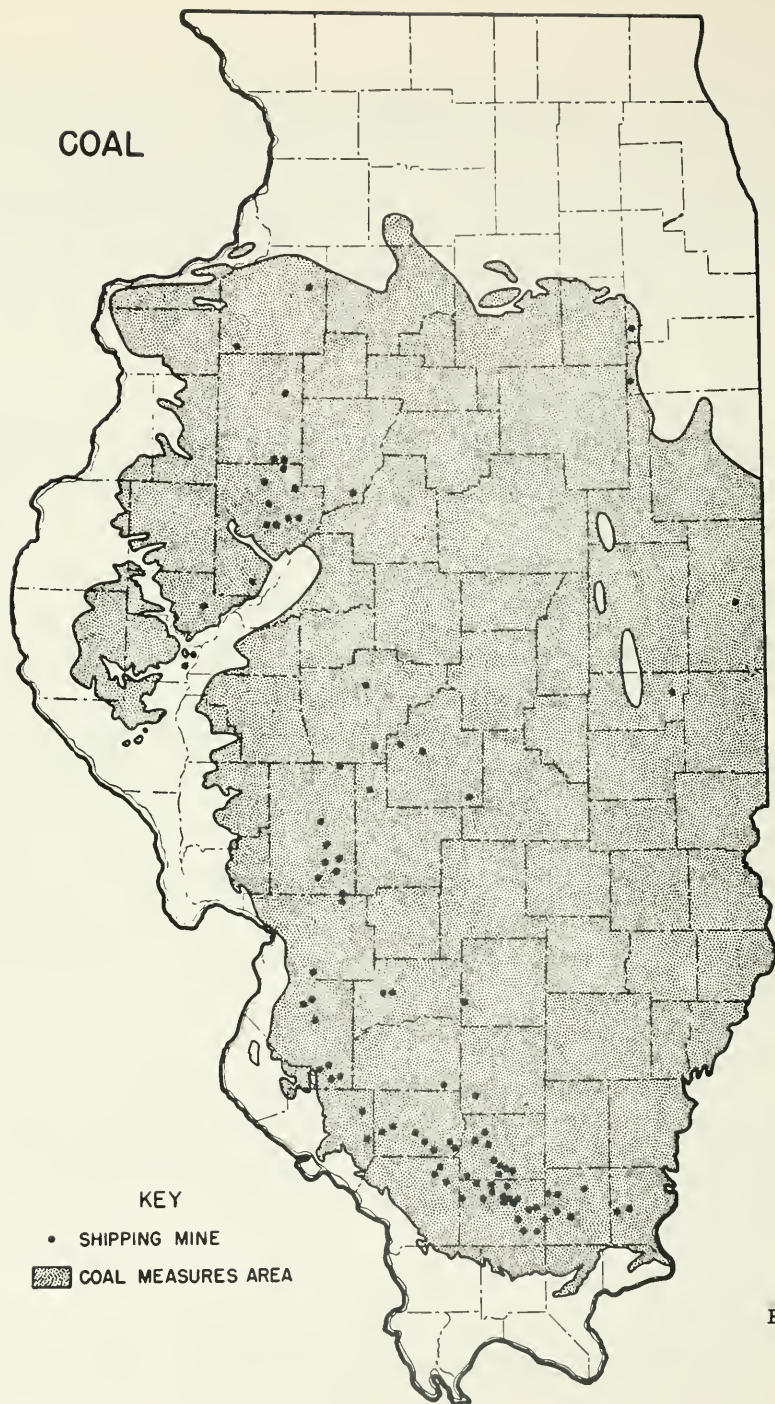


Figure 6

More than half of Illinois is underlain by the Coal Measures. Dots show locations of shipping mines as of January 1, 1953.

County	Franklin	Williamson	Sangamon	St. Clair	Peoria	Fulton
Mining Dist. or Seam	Franklin	Williamson	Springfield	Belleville -Saunton	Peoria	Fulton
M	9.99	8.77	13.09	11.17	15.41	16.33
Vol.	37.82	32.64	36.51	39.31	34.34	35.50
F. C.	49.27	51.41	41.14	39.20	38.52	37.01
Ash	7.92	7.18	9.26	10.32	11.73	11.16
Sul.	1.03	1.10	3.77	4.22	2.97	2.89
Btu.	11,800	12,200	11,000	11,200	10,400	10,200
Approximate Ash-Soft Temp. °F.	2375	2310	2115	1995	1970	1930
Grindability (hardgrove)	53-63	52-59	54-68	57-62	65-67	51-68

Legend:

M - per cent of moisture
Vol. - per cent of volatile matter
F. C. - per cent of fixed carbon
Ash - per cent of ash
Sul. - per cent of sulphur
Btu. - heating value

Source: State Geological Survey Bulletin No. 78

Table 1

industrial purposes (see Analysis on page 20.)

The gradual emergence of Fulton County leadership has no doubt been caused by its proximity to the Peoriarea. Transportation to Fulton County mines has been highly developed providing Peoria with an adequate supply of this fuel, with extensive reserves, particularly of No. 2 vein coal. There are ten large shipping mines in Fulton County transporting about 80 per cent of the coal produced, by rail. A substantial part of the remainder is shipped by barge.

There are 26 local mines in the county of Peoria producing in 1952, 373, 645 tons of coal, all for local consumption. In Tazewell County two mines produced 36, 520 tons of coal in 1952, again all for local consumption.

Cost of Coal:

Coal prices in Peoria reflect its favored location in respect to the mines. Fulton County coal costs approximately \$3.70 per ton in carload lots at the mine for washed screenings. The transportation costs to rail sidings in the Peoriarea is \$0.86 per ton. Thus the total delivered cost for carload lot users here is \$4.56 per ton at the present time. Some other coal of industrial importance is shipped in from Knox County, principally by truck. Another recently developed source of industrial coal is the local Morgan Peoria Mine, located about eight miles west of Peoria. Both the Knox County and Morgan Peoria coal are No. 6 vein which analyzes at about seven per cent ash and slightly over 11,000 Btu./lb. in the "as received" condition. The cost of washed screenings of this coal at the mines is approximately \$4.25 per ton. The trucking delivery costs vary between \$1.00 and \$1.25 per ton depending on the location of the mine.

Thus basic heat energy costs using Fulton County coal is 2,200 Btu./\$. In the case of Knox or some Peoria County coal described above, this value would be a maximum of 2,140 Btu./\$. The higher cost of the latter coal would, of course, be partially offset by the lower ash handling costs.

COKE:

Coke plays an important part as a raw material in industrial processes in the Upper Mississippi Valley States. Although, in itself a processed product, it is generally included in any inventory of natural mineral resources. The value of coke produced in the eight-state area in 1950 ranked fifth in importance of all resources.

Coke is most frequently processed by utilities in various locations. The most important sources of this product for the Peoriarea are well dispersed to the north, east, and south. Some coke is produced in the Granite City area but this is principally for local consumption. Incidentally, the producers in that area have been extensively exploring the possibility of the use of blending Illinois coal with other types in the production of metallurgical coke. The commercial feasibility of the operation is at this time, however, still questionable.

Regional coke sources to the east of importance to the Peoriarea are Terre Haute and Indianapolis, Indiana. To the north the Chicago area and Milwaukee, Wisconsin also supply local needs. Published rail freight rates favor the eastern suppliers, however, because of certain concessions granted under coke-in-transit rates. The northern suppliers have some competitive transportation cost advantages. Coke is also shipped into Peoria from as far north as St. Paul, Minnesota, on a competitive basis. The southern supply of coke locally used is centered about St. Louis. (9)

OIL:

Petroleum products represent the fourth most important mineral resource of the Upper Mississippi Valley States. (See page 23). There are considerable deposits of oil and gas pools in the State of Illinois, the richest of these being in the southern part of the state. (See figure 7).

In 1952 Illinois produced a total of more than 60 million barrels of oil valued at over \$166,000,000. Proved resources in the known pools of the state were estimated at slightly less than 640 million barrels as of December 31, 1952.

"In the twelve months ending April 30, 1953, 19 new pools, 52 extensions to pools, and 27 new 'pay sands' were discovered. In the past two or three years there has been considerable interest in testing for deep production and in the new pools and 'pay sands' just referred to there are numerous discoveries of production from rock horizons below those which have furnished the larger part of the state's oil to date." (6)

The presence of oil locally and the well developed network of crude oil pipe lines from the Kansas-Oklahoma area provide Illinois with an abundant supply.

Oil refineries in Illinois are essentially concentrated in the Joliet-Chicago area in the north, and in the St. Louis-Wood River district in the south with a few processors dispersed between these points. Such are the ones found in Peoria.

Of specific industrial importance to the Peoriarea is the question of petroleum as an industrial fuel. The two main categories of fuel that can be considered pertinent to the problem are the Residual Fuels: Bunker No. 6 and No. 5 fuel, and the lighter No. 2 fuel. *

In general, fuel oils are brought into the Peoriarea by all of the common carriers, truck transport, rail, and barge. However, the residual fuels are handled only by truck and by rail. There are no local supplier's storage facilities for this grade of fuel. Extensive local storage facilities are available for the No. 2 and closely related fuels. The specific plants are as follows:

* Fuel classification numbers are the commercial standards csl2 - 48 values.

OIL AND GAS POOLS

JUNE, 1944

STATE GEOLOGICAL
SURVEY

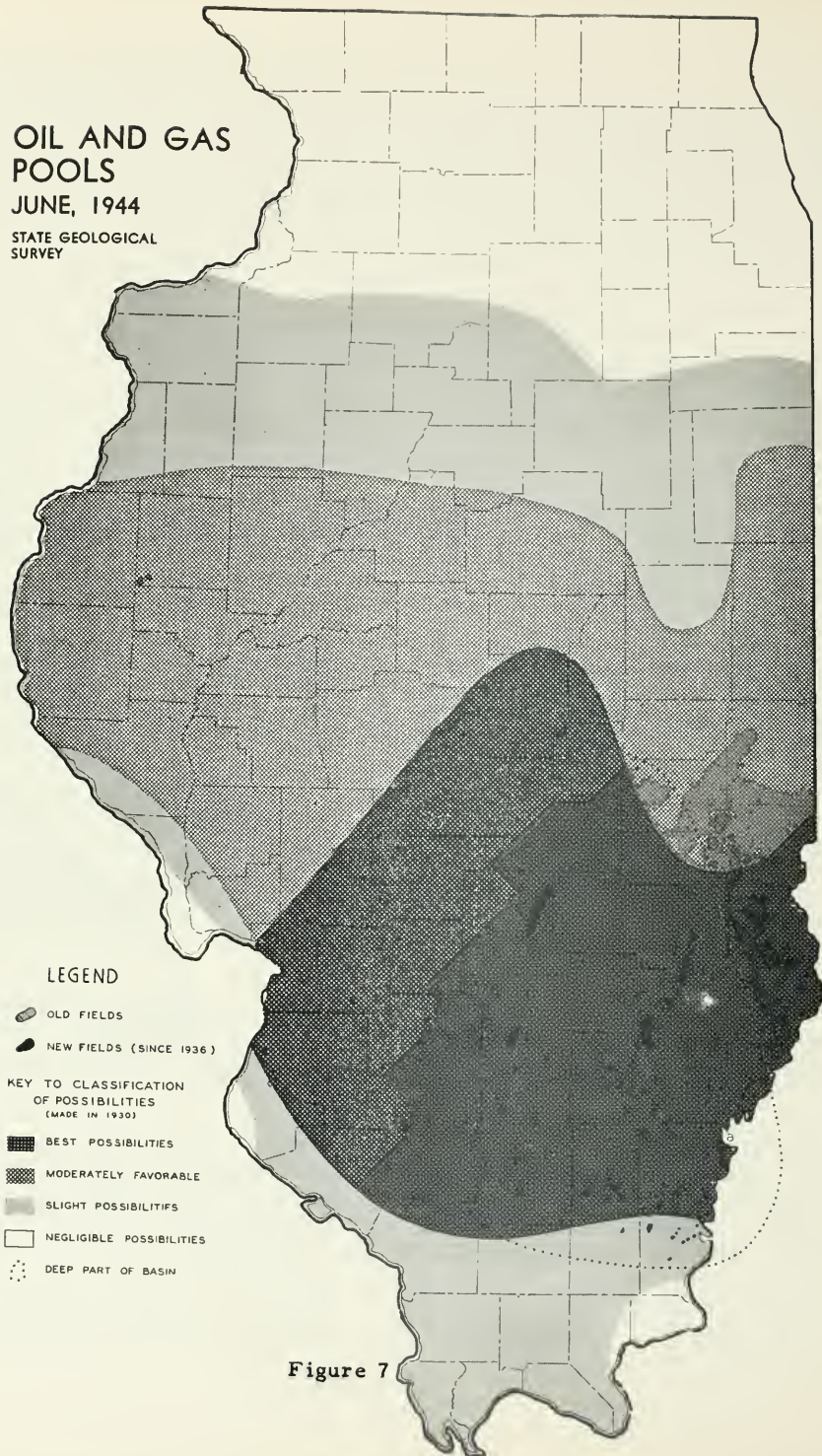


Figure 7

TRUNK PIPE LINES AND REFINERIES 1944

STATE GEOLOGICAL
SURVEY

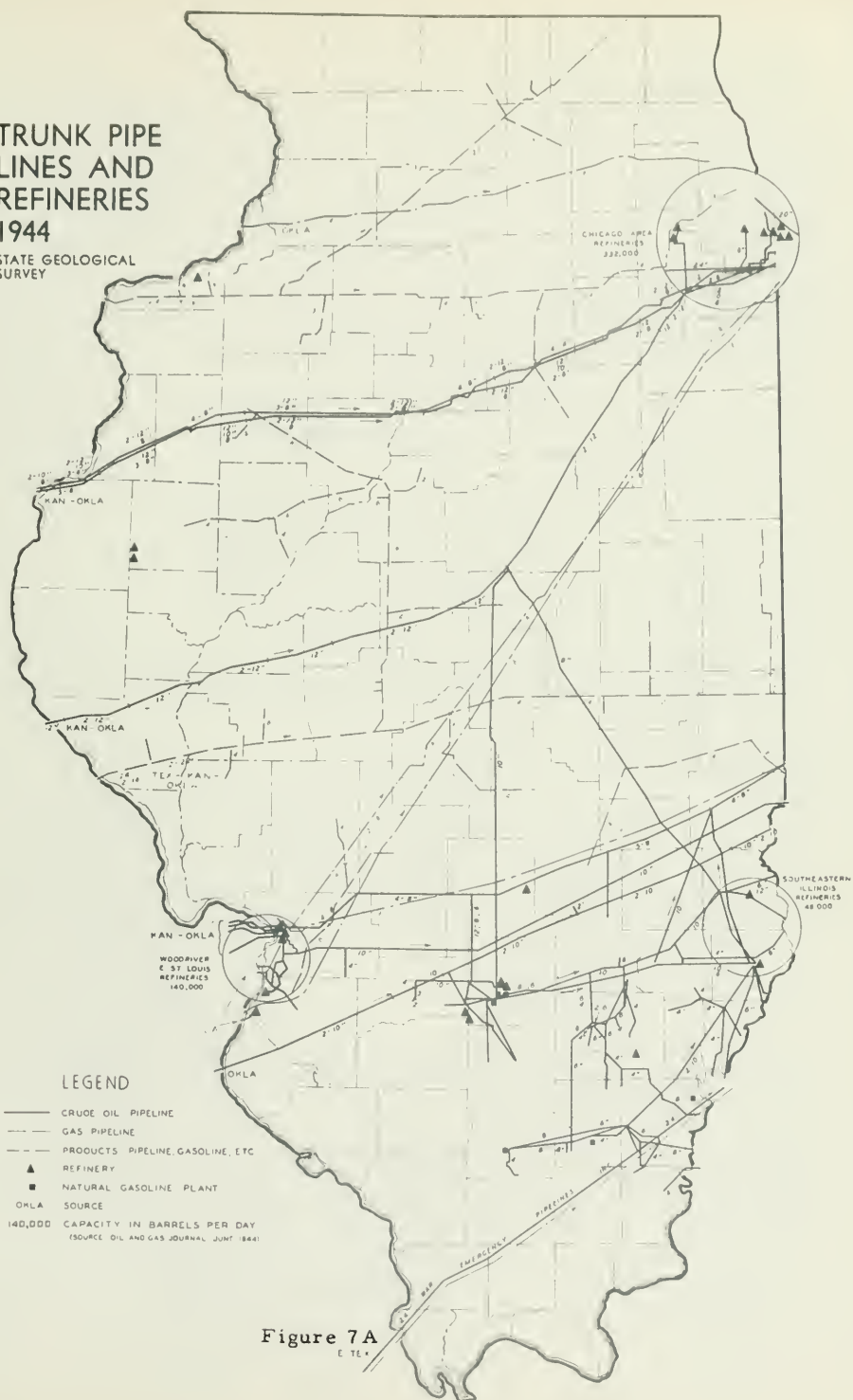


Figure 7A
E. T. L.

North Pekin.....	Standard Oil River Terminal
.....	Socony-Vacuum River Terminal
.....	Cities Service River Terminal
East Peoria.....	Simpson Oil Company River Terminal
Kingston Mines.....	Illinois Farm Supply Company River Terminal
Peoria.....	Sweney Gasoline and Oil Company River Terminal
Chillicothe.....	Sinclair Oil Company River Terminal

Industrial fuel costs in the area reflect the existence of local competition. There is, of course, some seasonal variation in these prices but these deviations are not great (the cost of Bunker oil varied \$.07 a gallon in the last nine months).

Typical of current tank car or transport prices (summer of 1954) are as follows:

Residual fuels:

Bunker No. 6 . . .	7 cents a gallon *
Bunker No. 5 . . .	8 cents a gallon
Bunker No. 2 . . .	10.75 cents a gallon

These prices are quoted on a minimum of 4,000 gallon deliveries.

No. 2 fuel is available for delivery to industrial users in smaller quantities (100 gallon minimum in truck tank wagons). The current price on this basis is 13.6 cents a gallon. **

The heating values of oils locally supplied are as follows:

Residual (No. 5, No. 6) - 145,000 to 150,000 Btu./gallon
(No. 2) - 137,000 to 139,000 Btu./gallon

Local customer-supplier practice on guaranteed delivery involves contracts on either a twelve month basis, or on a heating season basis running from September 1 to May 1.

GAS:

The availability of natural gas is closely associated with that of oil. Here, as was indicated in figure 7, a substantial source of this important industrial fuel is located in southern Illinois.

The gas distribution lines serving the state of Illinois are shown in figure 8. A sixteen inch pipe of the Panhandle Eastern Pipe Line Company serves the Peoria Metropolitan Area with natural gas. This pipe connects with the twenty-four inch cross-country trunk line south of Springfield.

* ** Prices are Standard Oil Company's, from Mr. G. J. Livasy, Industrial Department.

All of the natural gas provided in the Peoria-Tazewell County Area is supplied by the Central Illinois Light Company.

The present policy of this supplier is to limit new customers to 4,000 therms per month if using on a firm basis. Large users, however, may be served on an interruptible basis the year around, or on an off peak basis from April 1 through October 31.

Of importance to the future availability of natural gas in the Peoria area is the Transcontinental Pipe Line's request filed with the Federal Power Commission to increase the capacity of their system by approximately 50%. This will substantially increase the gas available to the local area.

An indication of the general terms and conditions of gas service and standard gas rates under various service conditions may be had by referring to the Central Illinois Light Company's statement sheets contained in the Appendix, page 499.

The quality of the natural gas provided locally is shown by its chemical analysis for a typical day as follows:

Carbon Dioxide	CO ₂	0	%
Oxygen	O ₂	0	
Nitrogen	N ₂	11.67	
Methane	CH ₄	76.89	
Ethane	C ₂ H ₆	6.68	
Propane	C ₃ H ₈	3.90	
Butanes	C ₄ H ₁₀	.77	
Pentanes-Plus	C ₅ H ₁₂	<u>.09</u>	
		100.00%	

Heat value 1000 Btu.

Specific gravity .685

Source: Central Illinois Light Company

Gas service is currently available to all of the following communities: Peoria, East Peoria, Bartonville, Creve Coeur, Washington, Elmwood, and Farmington. The Central Illinois Light Company will provide detailed gas cost estimates and answers to related questions upon request.

Other Minerals -

IRON ORE:

The principal source of crude iron ore mined in the United States is the Lake Superior Region. This region is comprised of Minnesota and Michigan with the former accounting in 1950 for about 70% of the national production. There are also deposits of iron ore located in Wisconsin and Missouri of industrial significance.

The threatened exhaustion of the Lake Superior iron ores may force a very important role upon the Illinois River Transportation system. If this were to be the case the Peoria area would be provided with some ready-made geographic advantages. Some high grade Swedish iron ore is now imported by Chicago steel mills and passes by Peoria coming up from New Orleans. "It may be that in the future these shipments, as well as high grade ore from other deposits such as those in Venezuela, will move up the Illinois River by barge in increasing volume." (11)

Although there are current searches for alternate supplies, the Mesabi range cannot by any means be written off at this time, as there are extensive sources of taconite available in this region, which, by beneficiation processes, can be made available.

The lower grade iron ore of Missouri and Iowa may ultimately play an important part in the iron and steel industry in the State of Illinois, again providing the Peoria area with unique locational advantages.

Another factor which looms on the horizon, although its effects on the specific local area under study would be hazardous to appraise at this time is the completion of the St. Lawrence Seaway Project, which would bring the rich far northern Labrador deposits of iron ore within economic range of the midwest.

PIG IRON:

Of the basic raw materials important to the Upper Mississippi Valley States, pig iron was second only to coal in value in 1950. Of the 16,615,000 tons produced in this year by the eight-state area, Indiana and Illinois accounted for 13,052,000 tons or almost 80%. The principal sources of this commodity in Illinois are in the Chicago area and Granite City. Attractive barge rates are available on this commodity from Chicago to Peoria, the price currently being \$1.40 per ton. (9)

STONE:

Seventh in value of mineral production in 1950 of the Upper Mississippi Valley States is stone. Included in this category are limestone, dolomite, and dolomitic limestone. Slightly over 79 million tons of these products were mined in the

eight-state area in 1950 having a value of \$111,817,000.

These commodities are also quite important to the State of Illinois as evidenced from the Table of state mineral production, page 497 in the Appendix.

Dolomite deposits are primarily concentrated in the northwest portion of the state in the Galena area. (See map of Limestone Outcrops by J. E. Lamar & R. S. Shrode, figure 9 on page 30.) To the immediate west and somewhat south of the Peoria area are located substantial deposits of limestone. Peoria County contains some scattered deposits of limestone that are mined for local consumption, principally agricultural and road building. In the southern portion of the state there are also considerable stone deposits ranging from high purity limestone to chert and cherty limestone.

SAND AND GRAVEL:

Sand and gravel resources are also of considerable commercial significance to the Upper Mississippi Valley Area.

The State of Illinois is rich in these deposits as may be seen from the map in figure 10 on pages 31 and 32.

By way of a summary of construction materials a map showing the deposits, quarries, and phasic processing plants in the State of Illinois is shown in figure 11 on page 33.

CLAY AND CERAMIC PRODUCTS:

The value of clay and ceramic products in Illinois alone, in 1952, amounted to an estimated 43 million dollars production, giving some indication of the regional importance of these materials. Refractories accounted for some \$10,880,000. The values of other clay products were: common brick - \$7,734,000; face brick - \$4,783,000; other structural clay products (paving block, sewer pipe, drain and structural tile, terra cotta, etc.) - \$4,248,000; and pottery - \$14,565,000. For location of clay deposits and the basic processing plants see the map in figure 12 page 34. (12)

CHEMICAL, METALLURGICAL, & PROCESSING MATERIALS:

Materials such as lead, zinc, fluorspar, silica, tripoli, ganister, etc., are important both in location of natural deposits and the phasic processing plants.

Important zinc deposits are located in the Galena, Illinois, area with the three states, Illinois, Iowa, and Wisconsin, sharing the mineral. Commercial zinc production, however, is divided between Illinois and Wisconsin. In 1952, Illinois produced 19,800 tons and Wisconsin 20,588 tons. (6 & 13) Missouri also produces zinc, principally in the Joplin district. The latest production statistics available are those of 1950, at which time Missouri metallic zinc production was 8,189 tons.

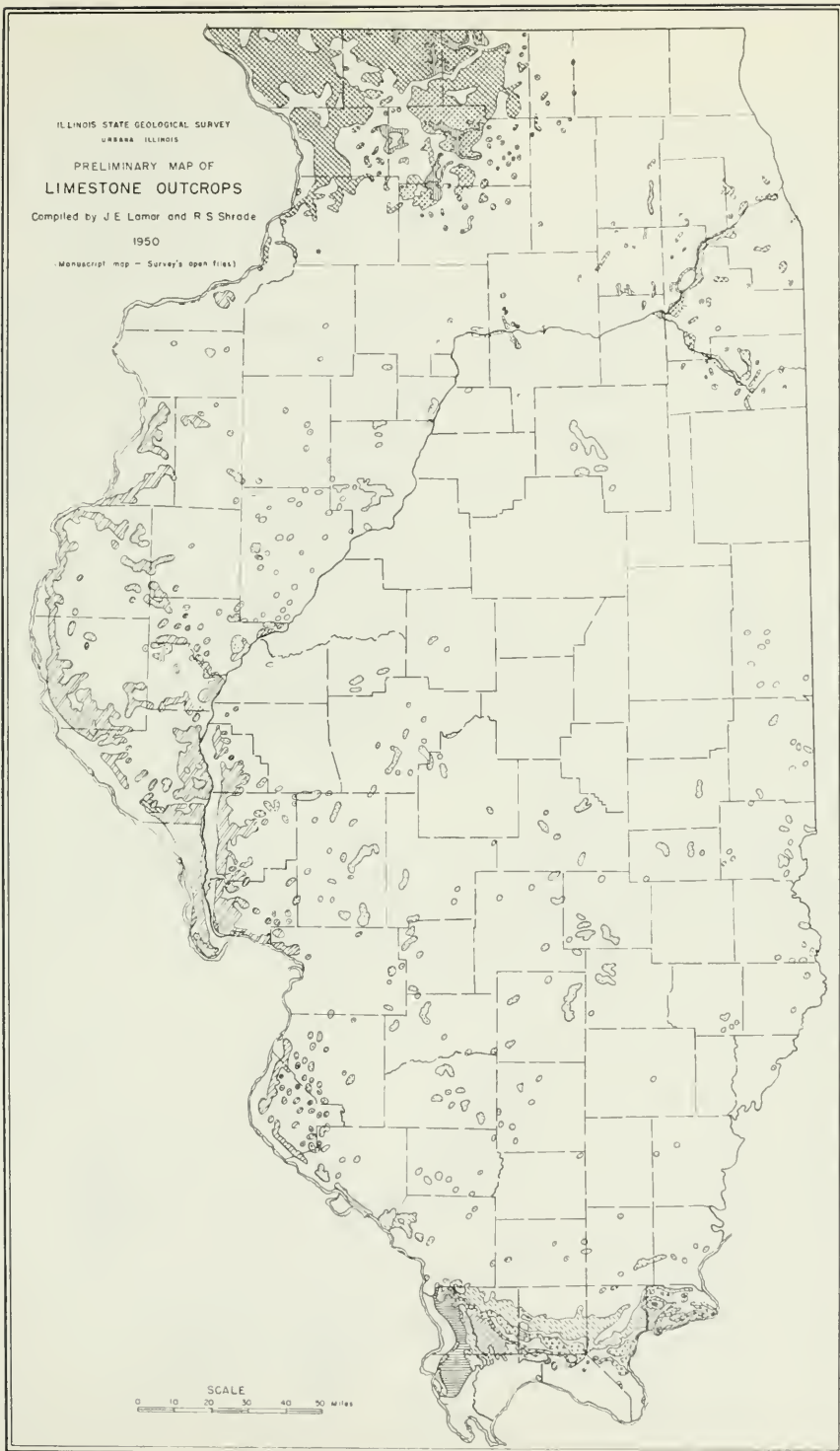
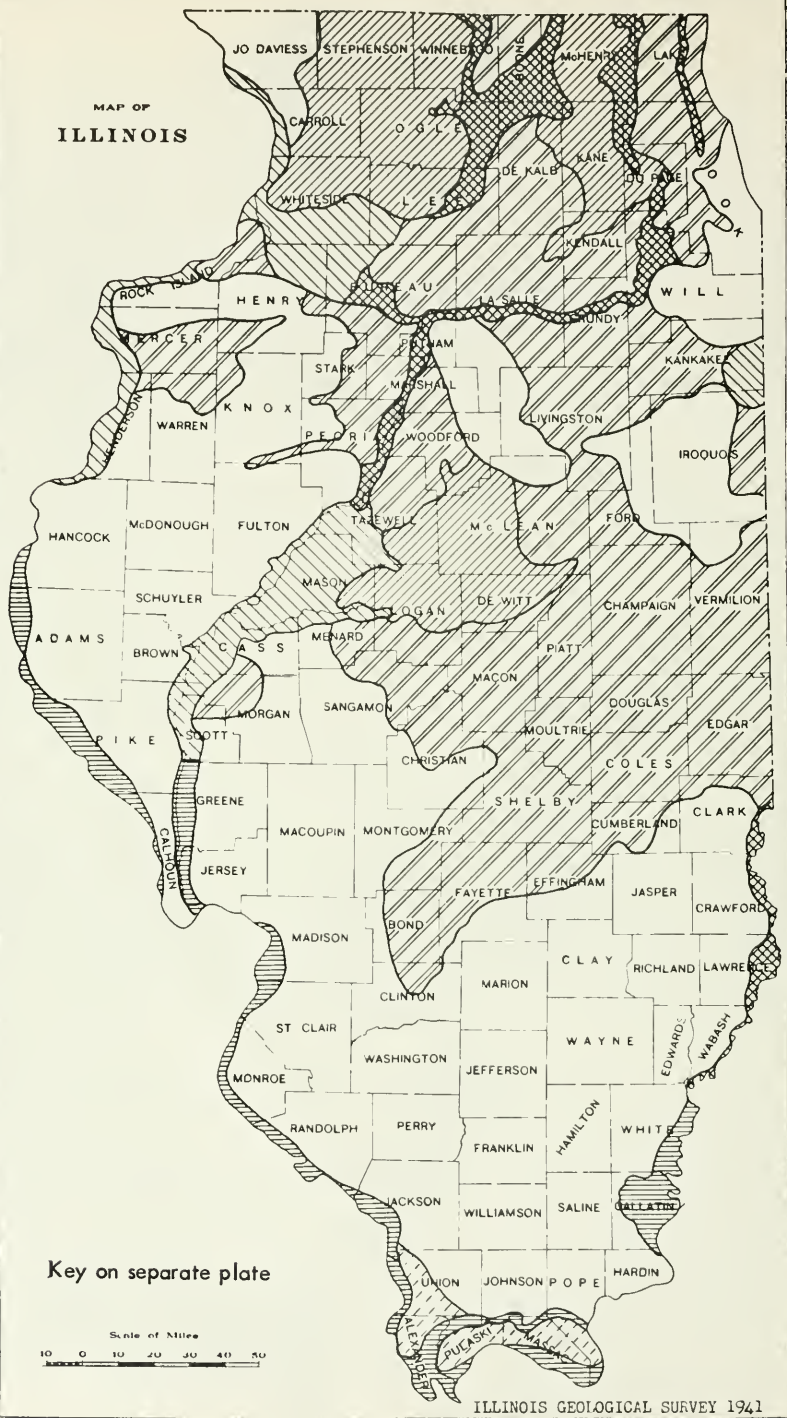


Figure 9 -30-

MAP OF
ILLINOIS







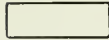


Key on separate plate

Scale of Miles
10 0 10 20 30 40 50

SAND AND GRAVEL RESOURCES

SAND AND GRAVEL (EXCLUDING SILICA SAND)*

-  Numerous, extensive, large gravel deposits.
-  Scattered large gravel deposits, mostly in terraces along the larger streams or in large hills or ridges.
-  Scattered, mostly small or medium sized gravel deposits.
-  Deposits of cherty gravel at many places ranging from small to large size; locally deposits of sand mostly fine grained.
-  Numerous, extensive sand deposits.
-  Gravel and sand in river flood plains; the gravel and sand are usually overlain by and interbedded with silt except in the river channels.
-  Gravel and sand generally absent or present only in small scattered deposits.

* The term gravel is used in the usual sense to denote materials consisting of a mixture of sand, pebbles and cobbles. Sand is used to describe materials consisting largely of sand grains with only minor amounts of fine rock fragments which will not pass a 4 mesh screen (about 1/5 inch).

Figure 10

STONE, SAND
AND GRAVEL,
CEMENT, LIME
FOR CONSTRUCTION
STATE GEOLOGICAL SURVEY

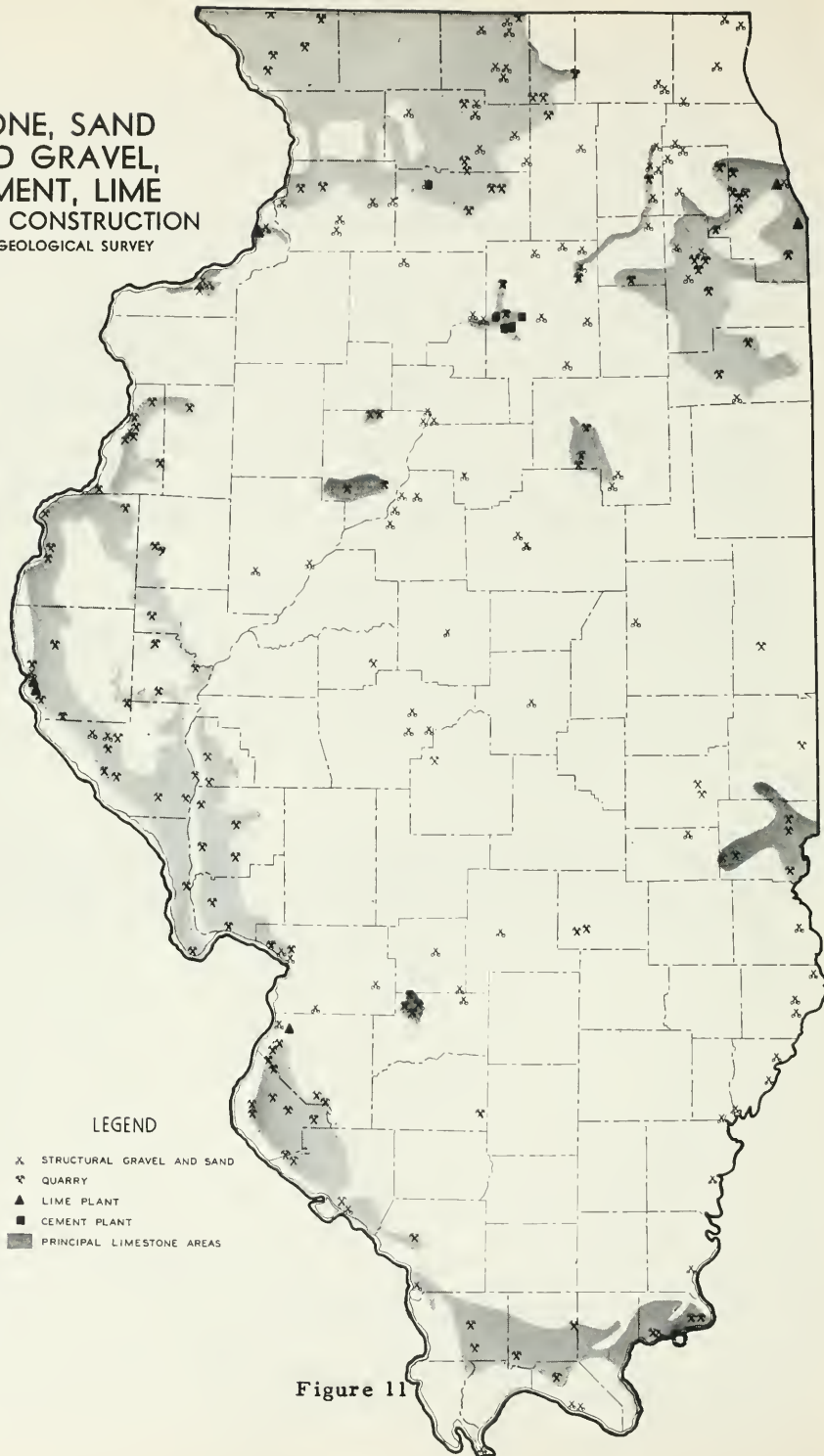


Figure 11

CLAY AND CERAMIC PRODUCTS 1944

STATE GEOLOGICAL SURVEY

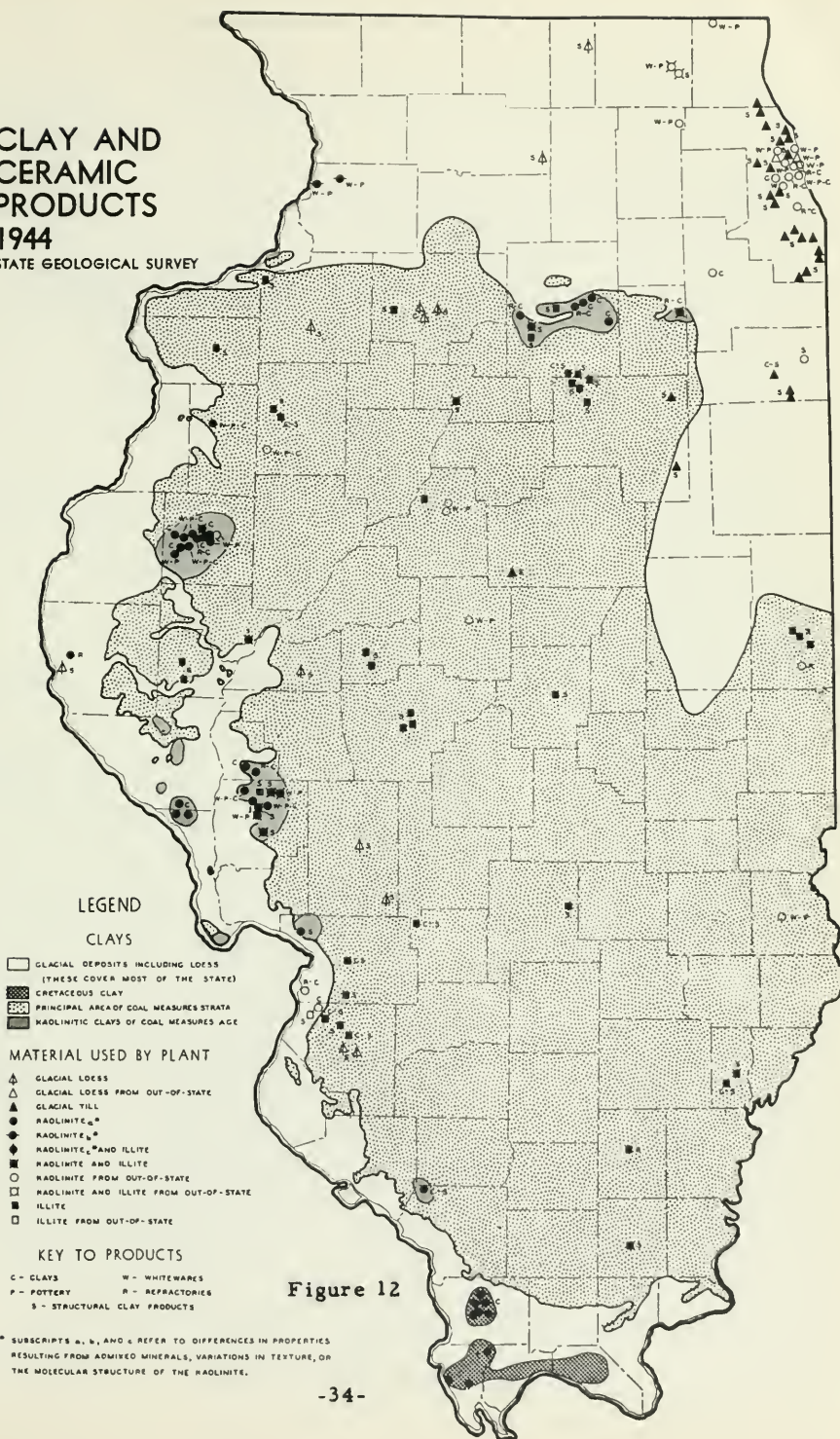
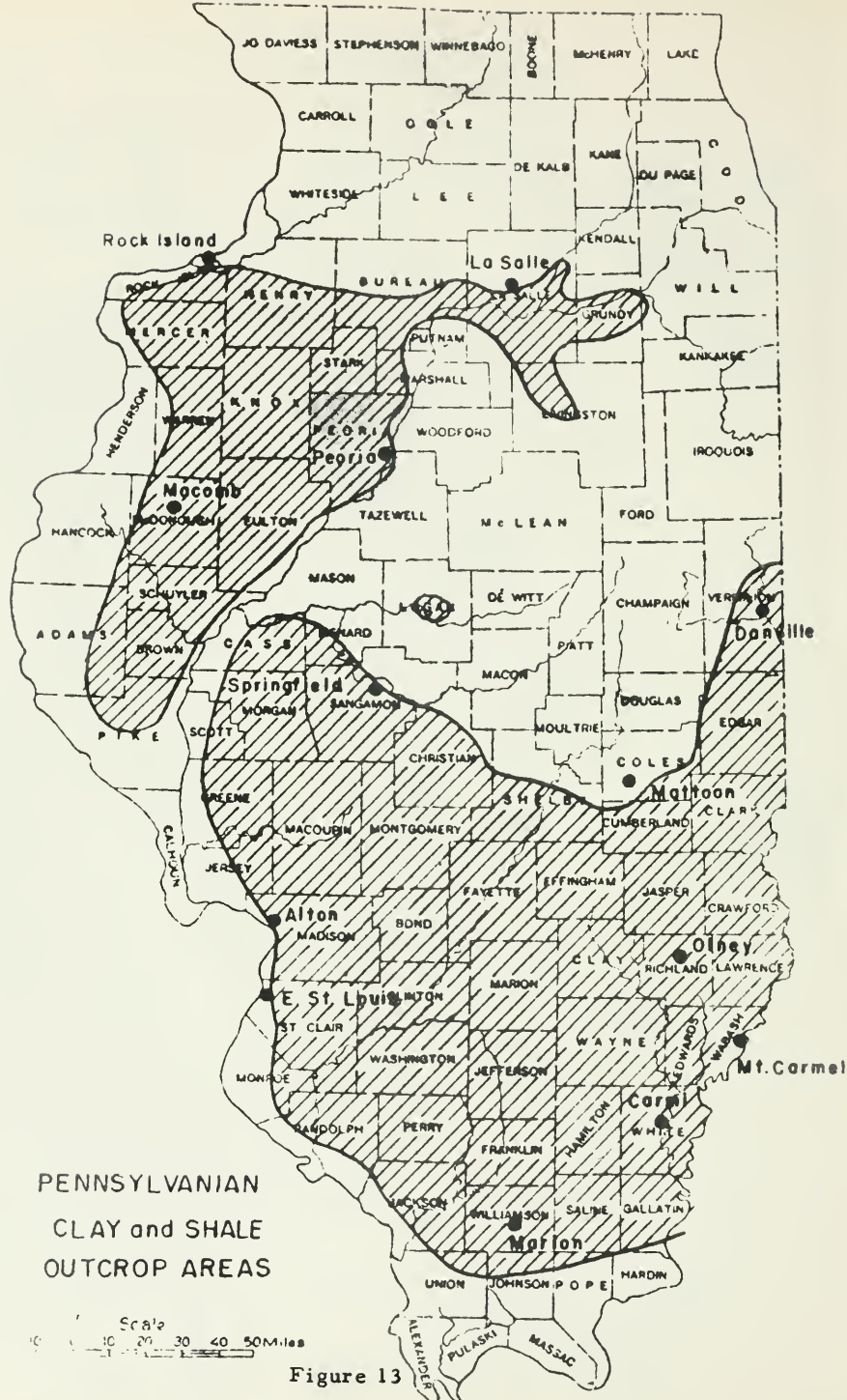


Figure 12



Upper Mississippi Valley States' deposits of lead are principally located in southeastern Missouri which is the principal lead producing region in the United States, accounting for over 30% of the nation's lead from domestic ores. (14)

Fluorspar continues to be an important industrial mineral in the eight-state area studied. In Illinois, approximately 207,000 tons were produced in 1952. More than half of the fluorspar comes from the Hardin-Pope County Area of southeastern Illinois. Although fluorspar is still in demand as a flux in the manufacturing of steel, it is becoming quite important in the blooming petro-chemical industry in this state, an industry which is becoming centered around Tuscola, about 110 miles southeast of Peoria.

Silica sand deposits of high quality are located throughout the eight-state area. The location of these deposits in Illinois are indicated on the map in figure 14 on page 37.

A summary map showing locations of deposits of all the minerals listed under this category is in figure 15 on page 38.



Figure 14

**CHEMICAL,
METALLURGICAL
AND PROCESSING
MATERIALS
AND METALS
1944**

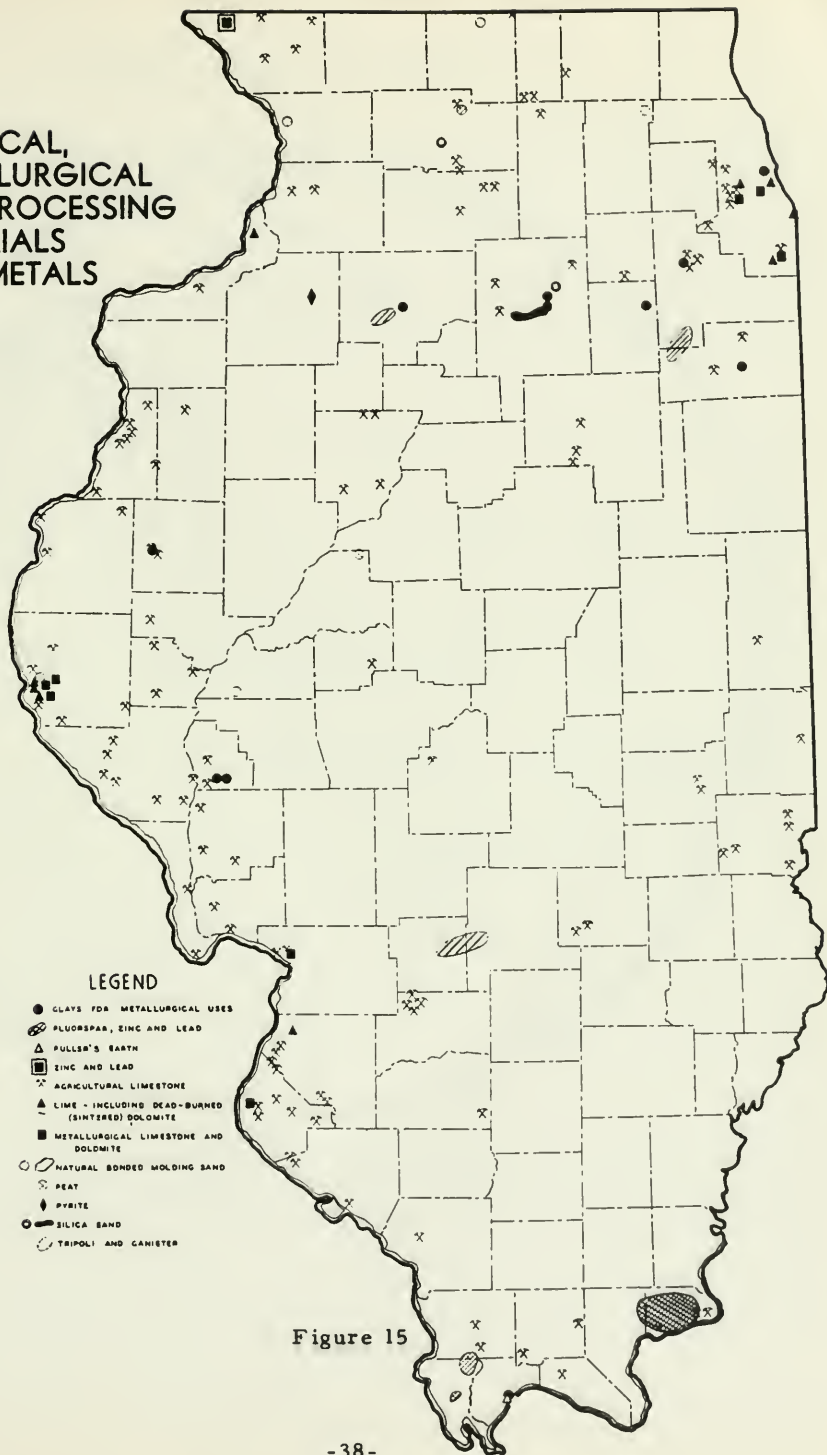


Figure 15

VALUE OF AGRICULTURAL PRODUCTS

1949



UPPER MISSISSIPPI VALLEY STATES

Figure 16

*These values in thousands of dollars.

Source; U. S. Census of Agriculture 1950 Vo. V

AGRICULTURAL RESOURCES

The mineral wealth of the Upper Mississippi Valley States, impressive as it is, is overshadowed by the agricultural wealth of the area. Whereas the region produced approximately 16 per cent of the nation's mineral wealth, with Illinois leading its surrounding states, the proportion of the nation's agricultural wealth represented by this eight-state combination was 32 per cent in 1949. Almost one-third of the nation's agricultural resources lie at the door step of the Peoria area. Most likely, the best perspective from which to view the agricultural portrait of this area can be gained from studying the national distribution of agricultural production covered in Chapter II beginning on page 39 as indicated in the 1950 Census of Agriculture, Volume V, Part 6.

Iowa is the largest producer of farm products in the Upper Mississippi Valley States, closely followed by Illinois. (See Table 2 on page 41)

In terms of specific products produced in these eight states, it is important to note that there are four important farm items of which more than half of the nation's total is accounted for locally. (See figure 17 below on this page.)

Importance of Specific Farm Commodity Production
In Upper Mississippi Valley States *
(Figures are a percentage of national output in 1950)

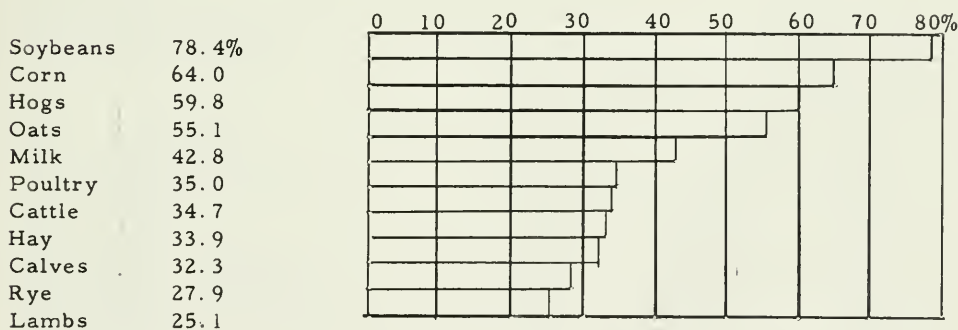


Figure 17

Thus soybeans, corn, and oats cultivation is notably concentrated in this area. In spite of this apparent concentration, however, the region's fertile farmlands support a wide diversity of crops and livestock. An appreciation of this diversification may be gained by referring to the regional farm production illustrated in Tables 2, 3, and 4 on pages 41, 42, and 43 respectively. Although fruit is not included in this study, there are at least three types which are found to have some local concentration. These are cherries, apples, and strawberries. (Over half the nation's cherries are grown in the eight-state area.)

* Source: Table 3 on page 42.

AGRICULTURAL PRODUCTION OF THE
UPPER MISSISSIPPI VALLEY STATES

<u>State</u>	<u>1949 (Value of Products Sold)*</u>
Indiana	\$ 731, 893
Illinois	1, 361, 578
Iowa	1, 635, 350
Kentucky	417, 060
Michigan	473, 612
Minnesota	960, 552
Missouri	719, 877
Wisconsin	764, 629
United States	7, 064, 551
Percentage	32.0%

Source: 1950 Census of Agriculture, Volume V., Part 6.

* In Thousands of Dollars

Table 2

ANNUAL CROP PRODUCTION
1953 Production

State	<u>Illinois</u>	<u>Indiana</u>	<u>Iowa</u>	<u>Missouri</u>
Rye - 1000 bushels	560	930		448
Corn - 1,000,000 bushels	500	242	581	136
Hay - 1000 tons	4,105	2,485	6,474	2,485
Oats - 10 ⁶ bushels	115	46	155	32
Potatoes - 1000 bushels	412	3,062	630	682
Winter Wheat - 10 ⁶ bushels	56.8	46.1		41.0
Spring Wheat - 10 ⁶ bushels				
Soybeans - 1000 bushels	76,896	36,855	34,336	25,536
State	<u>Wisconsin</u>	<u>Michigan</u>	<u>Minnesota</u>	<u>Kentucky</u>
Rye - 1000 bushels	529	667	1,875	
Corn - 1,000,000 bushels	150	80	269	71
Hay - 1000 tons	7,752	3,611	6,909	1,979
Oats - 10 ⁶ bushels	123	48	162	
Potatoes - 1000 bushels	14,335	10,730	12,480	1,479
Winter Wheat - 10 ⁶ bushels			14.7	
Spring Wheat - 10 ⁶ bushels				
Soybeans - 1000 bushels	812	2,090	27,696	1,248
	<u>Total</u>	<u>Total U. S.</u>	<u>Percentage</u>	
Rye - 1000 bushels	5,009	17,998	27.9	
Corn - 1,000,000 bushels	2,029	3,177	64.0*	
Hay - 1000 tons	35,800	105,300	33.9*	
Oats - 10 ⁶ bushels	681	1,216	55.1*	
Potatoes - 1000 bushels	43,810	373,711	11.7	
Winter Wheat - 10 ⁶ bushels	143.9	877.5	16.4	
Spring Wheat - 10 ⁶ bushels	14.7	278.1		
Soybeans - 1000 bushels	205,469	262,341	78.4*	

* Slide Rule Calculation

Source: Commodity Year Book, 1954

Prepared and Published by Commodity Research Bureau
82 Beaver Street, New York City

Table 3

ANNUAL LIVESTOCK PRODUCTION
1950

State		<u>Indiana</u>	<u>Illinois</u>	<u>Iowa</u>	<u>Kentucky</u>
Cattle Marketings	1.	605	1,521	2,397	431
Calves - 1000 head		272	333	250	305
Hogs - 1000 head		6,623	8,254	16,655	1,452
Sheep - 1000 head		43	31	111	64
Lambs - 1000 head		349	559	1,005	446
Milk - 10 ⁶ pounds		3,708	5,208	6,171	2,428
Poultry - 1000 birds		24,838	25,840	40,246	14,952
State		<u>Michigan</u>	<u>Minnesota</u>	<u>Missouri</u>	<u>Wisconsin</u>
Cattle Marketings	1.	351	1,028	979	552
Calves - 1000 head		396	524	493	1,291
Hogs - 1000 head		1,130	5,262	5,402	2,656
Sheep - 1000 head		30	51	94	14
Lambs - 1000 head		218	588	782	185
Milk - 10 ⁶ pounds		5,420	8,067	4,132	14,796
Poultry - 1000 birds		16,499	25,985	26,198	18,675
		<u>Total</u>	<u>United States</u>	<u>Percentage*</u>	
Cattle Marketings	1.	7,864	22,684	34.7	
Calves - 1000 head		3,864	11,975	32.3	
Hogs - 1000 head		47,434	79,361	59.8	
Sheep - 1000 head		438	2,627	16.66	
Lambs - 1000 head		4,132	16,446	25.1	
Milk - 10 ⁶ pounds		49,930	116,602	42.8	
Poultry - 1000 birds		193,233	550,593	35.0	

1. Excludes interfarm sales

* Slide Rule Calculations

Source: United States Department of Agriculture
1950 Census of Agriculture, Volume II

Table 4

Some idea of the specific state product concentration is also provided by Tables 2, 3, and 4 on pages 41, 42, and 43 respectively. These figures graphically illustrate the leadership of Illinois in soybean production, of Iowa in corn and livestock, and of Minnesota in rye.

ILLINOIS AGRICULTURE:

The composite agricultural production pattern for the State of Illinois is shown in Table 5 on this page.

Illinois Agricultural Production - 1953
(From Illinois Cooperative Crop Reporting Service)

<u>Commodity</u>	<u>Amount</u>	<u>Value-\$1, 000</u>
Corn	500, 472, 000 bushels	\$725, 684
Soybeans	76, 896, 000 bushels	199, 930
Oats	115, 070, 000 bushels	82, 850
Barley	715, 000 bushels	858
Wheat	56, 781, 000 bushels	107, 884
Rye	560, 000 bushels	728
All Hay	4, 105, 000 tons	98, 520
All Cattle on farm	3, 869, 000 head	564, 874
Hogs on farm	6, 297, 000 head	183, 872
Sheep	550, 000 head	9, 680
Chickens	20, 948, 000 head	27, 232
Milk Production	5, 192, 000, 000 pounds	

Table 5

The leading state crop is corn, followed by oats and soybeans. Truck crops and fruit production are not included in this summary table 5 on this page as their importance is of a smaller regional nature.

Maps showing the distribution of crops and livestock raising in this state are found in Figures 18, 19, 20, 21, 22, 23 on pages 45, 46, 47, 48, 49, 50 respectively. Although these maps are not based on current data, it is felt that the actual geographic distribution of these activities has not substantially changed in the interim.

Of immediate importance to the Peoriarea in terms of agricultural resources is the production of those counties bordering the metropolitan area. (See table 6 on page 51) The U. S. Department of Commerce has established the City of Peoria as the major trading center of its surrounding counties. The selection of counties included in the production figures in table 6 on page 51 is based on the above definition. *

* The counties of Menard, Dewitt, and Logan have been added. Although they are not included within the natural trading area boundary, they have been included for purposes of agricultural production as their geographic location brings them as close as the boundary counties included in the trading area definition.

CORN ACREAGE 1941

ILLINOIS COOPERATIVE
CROP REPORTING SERVICE

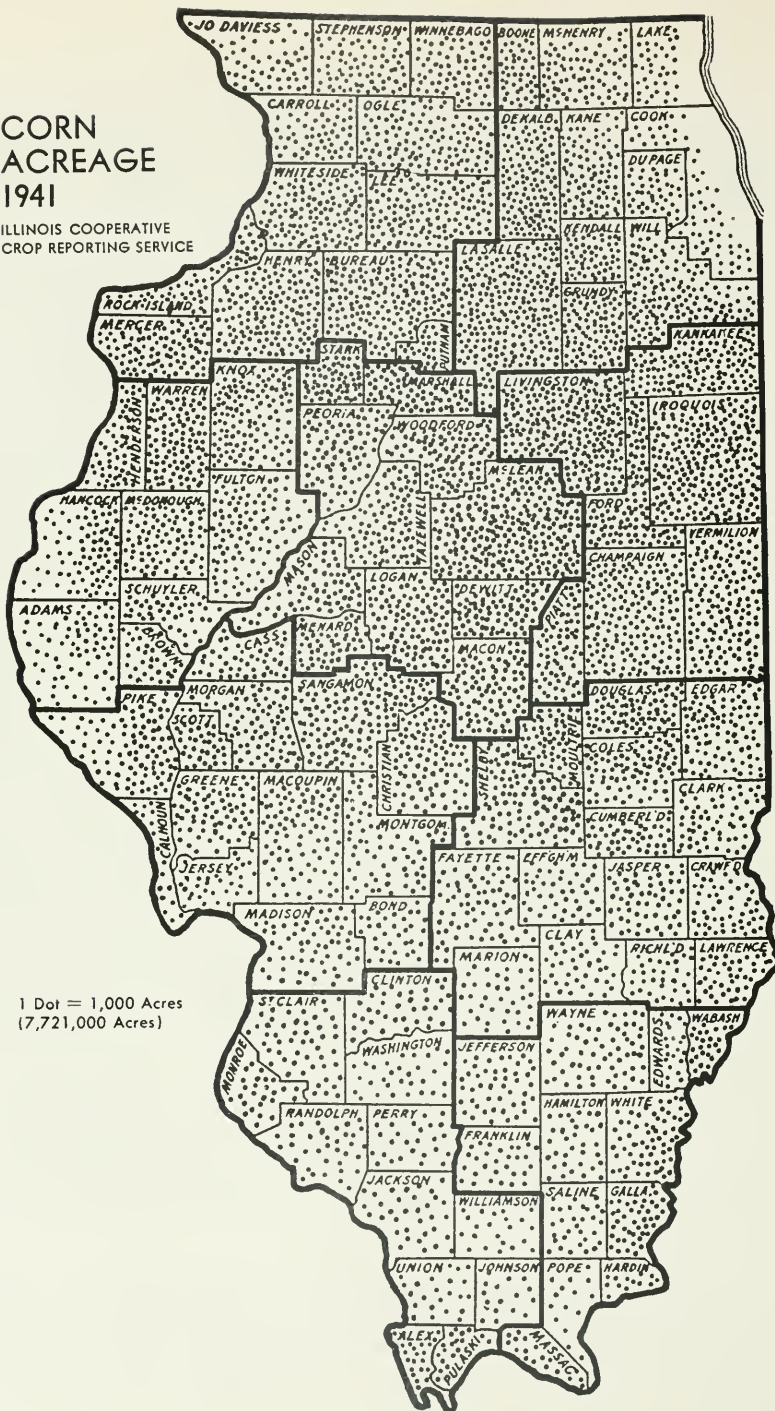


Figure 18

SOYBEANS HARVESTED FOR BEANS ACREAGE — 1941

ILLINOIS COOPERATIVE
CROP REPORTING SERVICE

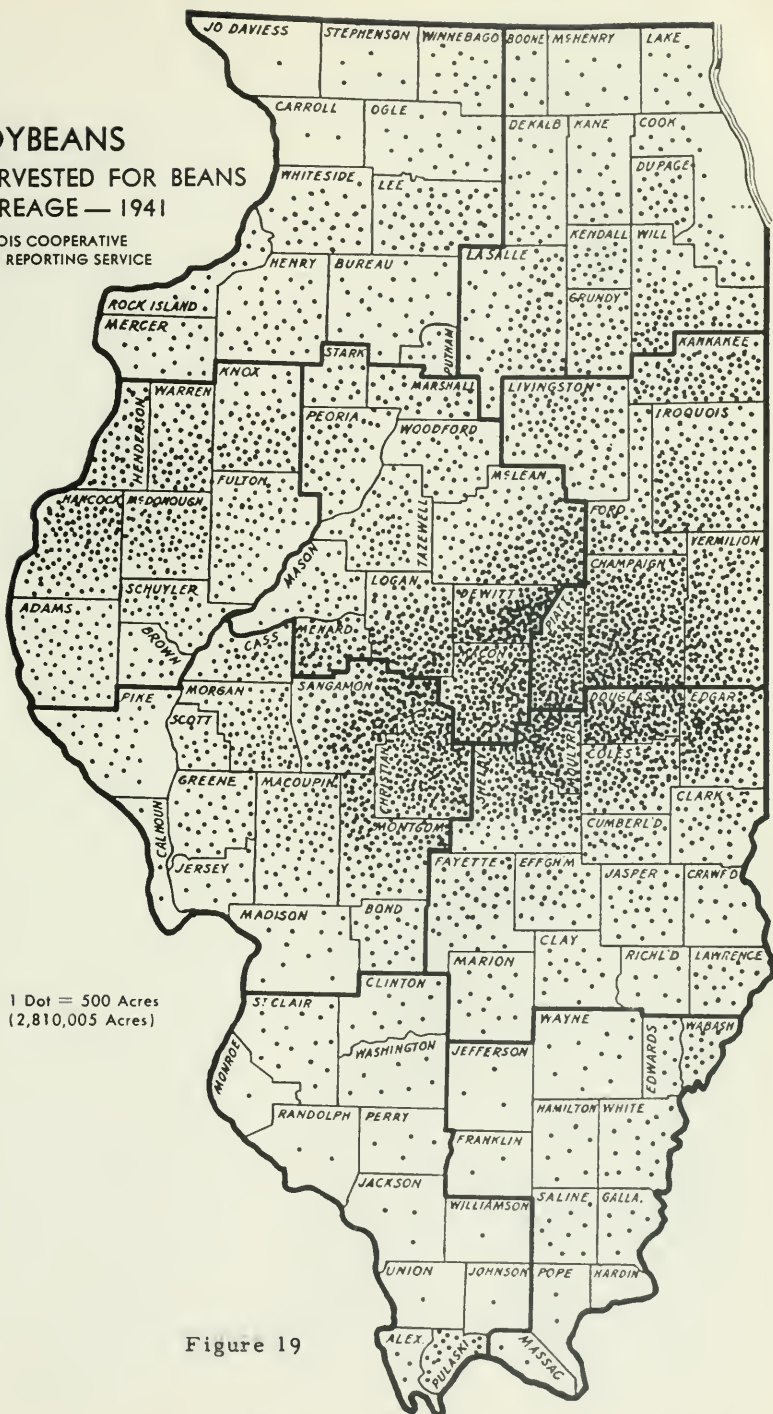


Figure 19

ACREAGE OF SPECIFIED FIELD CROPS AND VEGETABLES HARVESTED
FOR THE UNITED STATES 1949, 1944, AND 1939

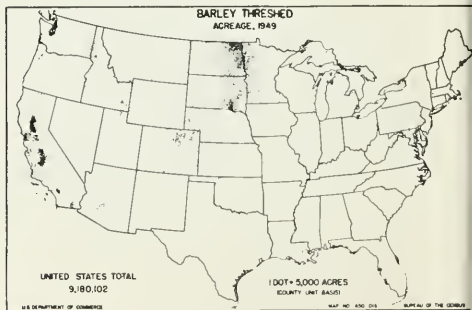
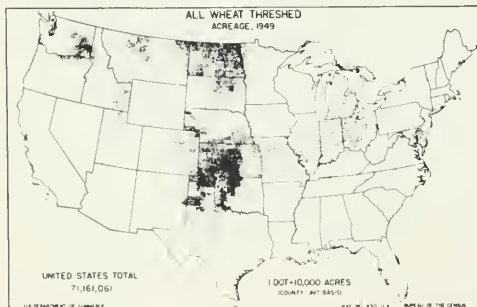
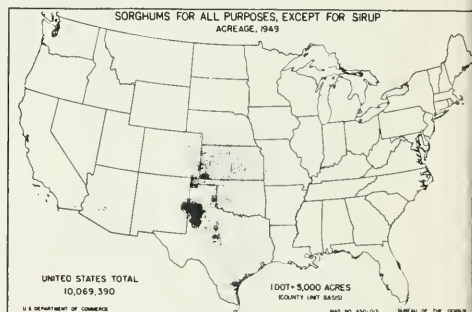
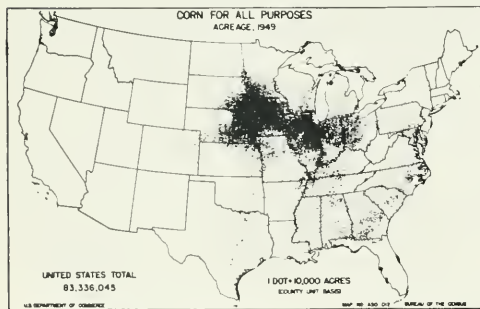
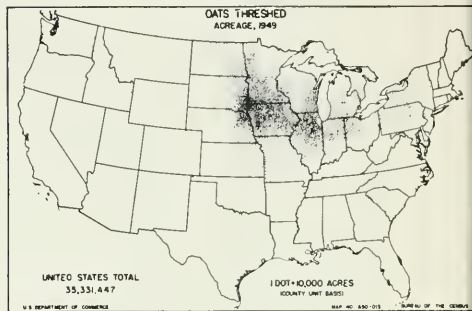
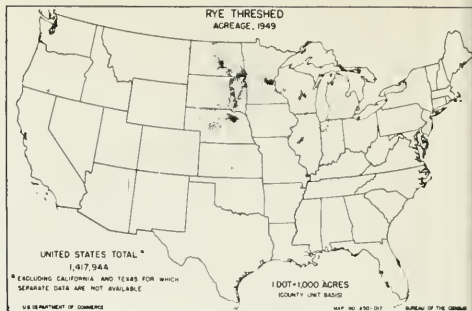
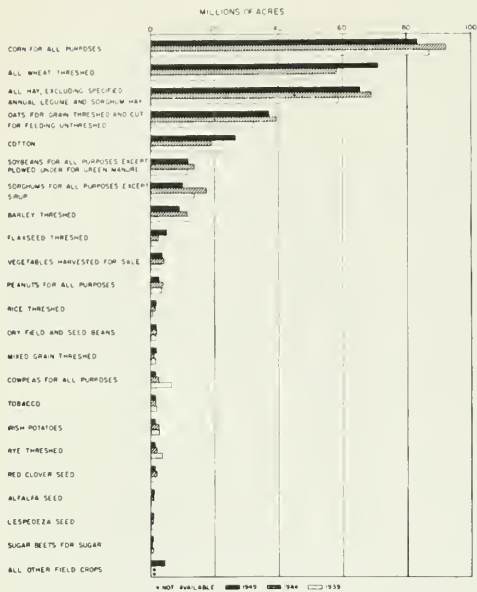
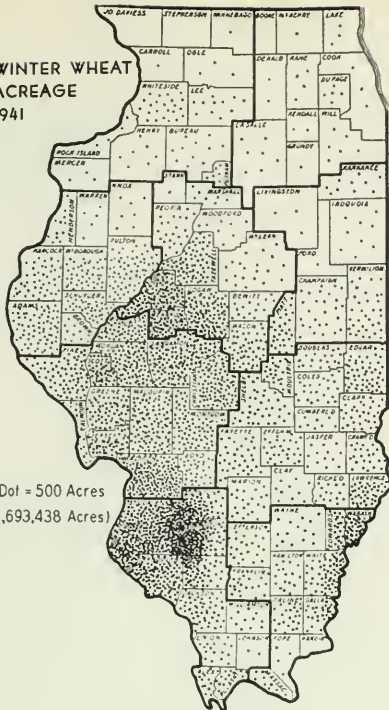


Figure 20

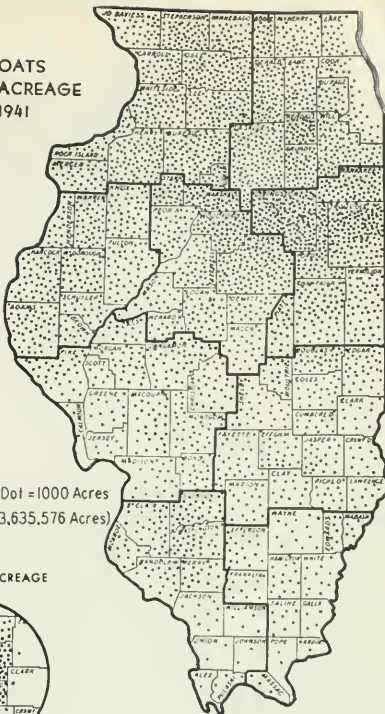
WINTER WHEAT ACREAGE 1941

1 Dot = 500 Acres
(1,693,438 Acres)

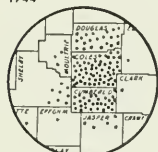


OATS ACREAGE 1941

1 Dot = 1000 Acres
(3,635,576 Acres)



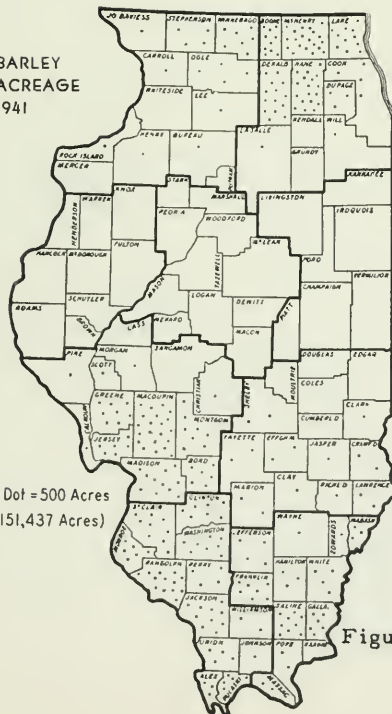
BROOMCORN ACREAGE 1944



1 Dot = 200 Acres
(25,800 Acres)

BARLEY ACREAGE 1941

1 Dot = 500 Acres
(151,437 Acres)



TAME HAY ACREAGE 1941

1 Dot = 1000 Acres
(2,671,000 Acres)

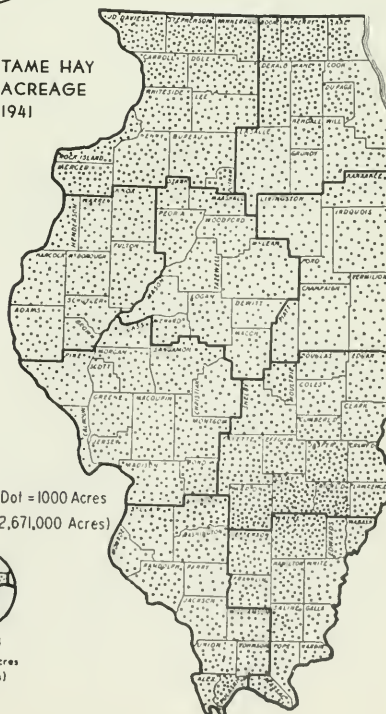
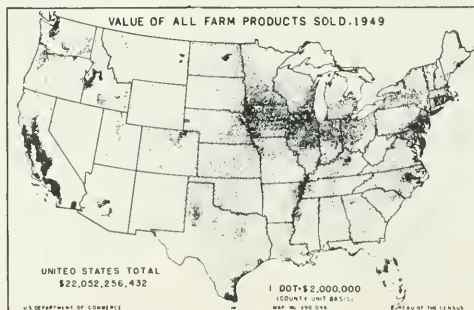
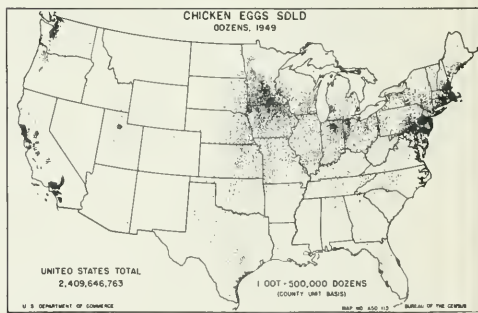
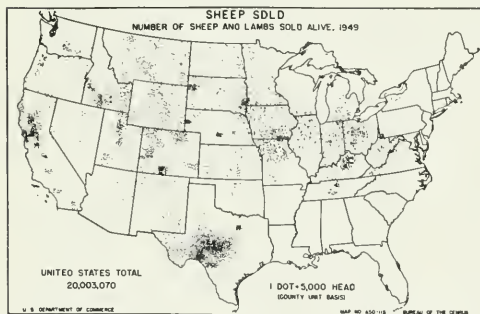
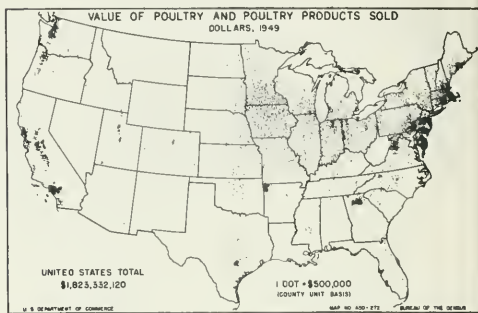
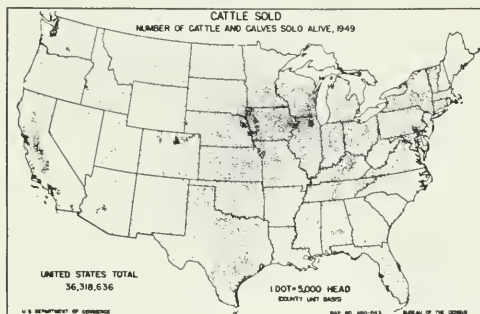
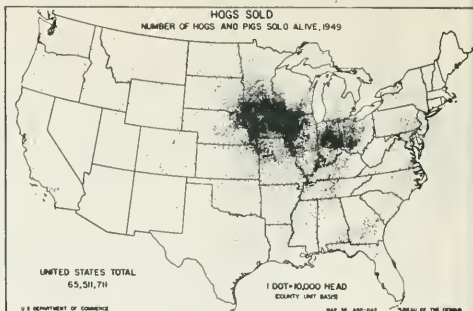


Figure 21 COTTON

1 Dot = 100 Acres
(4,607 Acres)





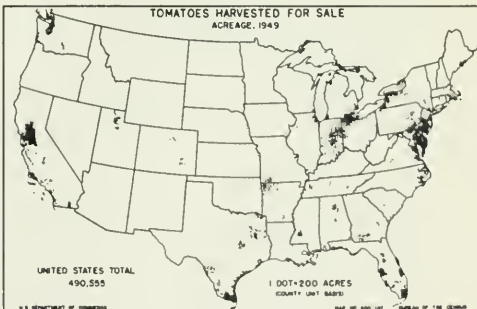
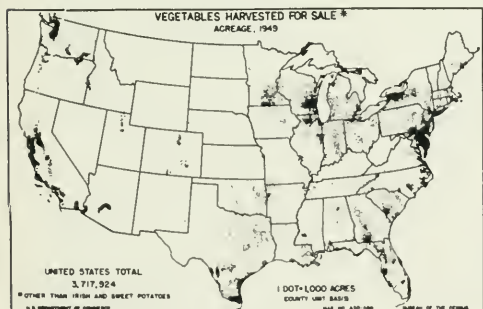
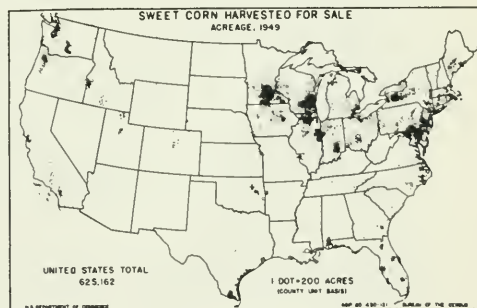
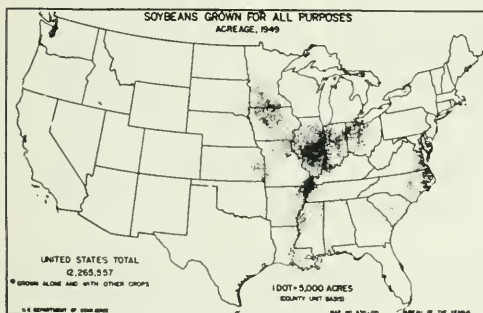
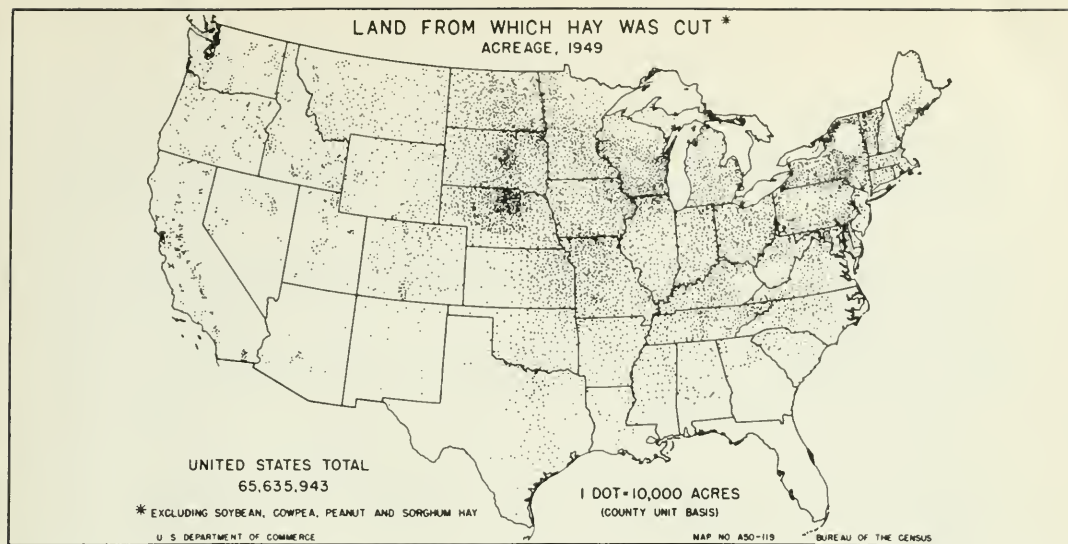


Figure 23

PEORIA AREA AGRICULTURAL STATISTICS
(PRODUCTION, 1953 - ANIMALS ON FARMS, January 1, 1953)

County	1000 bushels	Soybeans for beans-1000 bushels	Oats- 1000 bushels	Barley- bushels	Wheat- 1000 bushels	Rye- bushels	All Hay- 1000 tons	All Cattle- 1000 head	Hogs- 1000 head	Sheep	Chickens- 1000 head
Dewitt	5,510	1,171	1,005	-	243	-	28	27	40	4,100	106
Fulton	6,434	919	1,309	3,100	572	2,800	72	67	154	10,800	209
Knox	7,916	607	1,978	3,100	119	1,500	80	71	164	11,100	203
Livingston	15,097	1,569	4,273	2,500	31	-	71	71	58	9,300	589
Logan	10,018	1,596	1,883	-	938	-	47	37	57	7,500	207
Marshall	4,758	372	1,559	-	125	-	29	30	62	5,100	147
Mason	4,707	648	399	-	1,277	81,500	24	18	24	1,100	94
McDonough	5,863	942	1,647	-	447	1,600	39	52	146	6,800	144
McLean	17,632	1,618	4,719	3,000	187	1,300	112	98	150	16,200	400
Menard	3,541	848	427	-	662	1,300	17	21	47	3,300	98
Peoria	5,510	637	1,542	8,100	438	1,400	65	42	85	3,300	211
Stark	3,727	194	1,232	-	29	-	25	27	85	5,100	85
Tazewell	7,573	1,102	1,418	3,500	803	28,300	56	44	61	6,800	183
Warren	6,433	464	1,804	-	44	-	39	61	195	8,300	124
Woodford	7,093	584	2,084	3,600	125	1,300	53	42	50	6,900	188
Total	111,812	13,471	27,280	26,900	6,040	121,000	757	708	1,378	110,700	2,988
State	500,000	76,896	115,000	715,000	56,800	560,000	4,105	3,869	6,279	550,000	20,944
% of Total	22.3	17.5	23.7	3.75	10.6	21.7	18.4	18.3	21.9	20.1	14.3

Source: Illinois Crop Reporting Service (19)

Table 6

A review of table 6 on page 51 indicates the concentration of agricultural products in the immediate vicinity. Corn, oats, rye, hogs, and sheep all top the 20% figure for this area.

In addition to the general agricultural crops just mentioned, truck farm products are also of considerable importance to the Peoriarea. A number of vegetable canning plants are located in Peoria, Tazewell, and Woodford Counties processing such commodities as tomatoes, sweet corn, asparagus, peas, and pumpkins. These packing plants of course process local crops, the distribution of which may be seen from the maps in figures 24, 25, and 26 on pages 53, 54, and 55 respectively.

AGRICULTURAL MARKETING:

Grain -

Although the marketing of grain in Illinois is handled by truck, rail, and barge, the latter means of transportation is growing in importance, a fact of significance to the Peoriarea. In recent years an elaborate network of inland elevators and large river houses have been spawned throughout the state. Such cities as Pekin and Chillicothe, within the area, and Lacon, Henry, Hennepin, and Havana, adjacent the area, have become sites of large riparian elevators. The importance of this riverside development is reflected in the grain receipts of Chicago. In 1933 a total of 137,000 bushels of corn and wheat were reported received by waterway in that city. By 1950 approximately 29,500,000 bushels of grain were shipped in by water. This represented about 28% of all grain delivered to Chicago. In the case of corn, 38% of that commodity moved into Chicago came by barge. *

St. Louis and Peoria are also hubs of the grain marketing network in the Upper Mississippi Valley States. In 1953 Peoria receipts for corn were 27 million bushels. An additional one and one quarter million bushels of rye were marketed here. These were the grain products of major marketing importance to the two counties. Small amounts of other grains such as Milo were also locally purchased. Oats, wheat, and soybeans are not commodities of consumptive importance to the Peoria Metropolitan Area, although there are substantial markets for some of these grains near by. Decatur, Illinois, about 80 miles from Peoria, is a center of production of soybean products. Considerable wheat is also milled in that city.

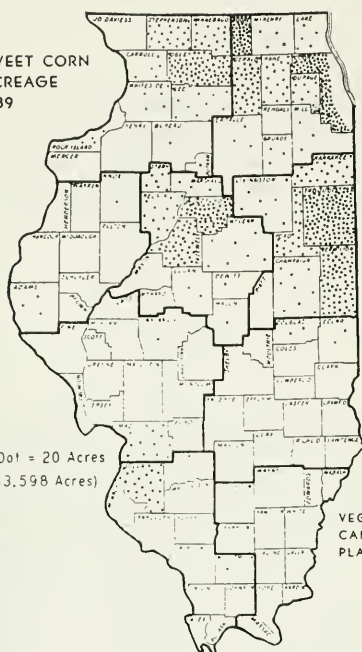
A comparison of the production statistics for the area tabulated in table 6 page 51 and local consumption indicate that only a small portion of the local resources are used by the area. As an illustration, corn which is the predominant local grain purchase, accounts for but 23% of the fifteen-county supply, and as was pointed out before, none of the other grains except rye have a local market. Although there are no detailed statistics on how much of the grain consumed in Peoria comes from the fifteen-county area, it has been estimated that about 50%

* Peoria Union Stockyards Company - Livestock Reports

LEADING VEGETABLE CROPS

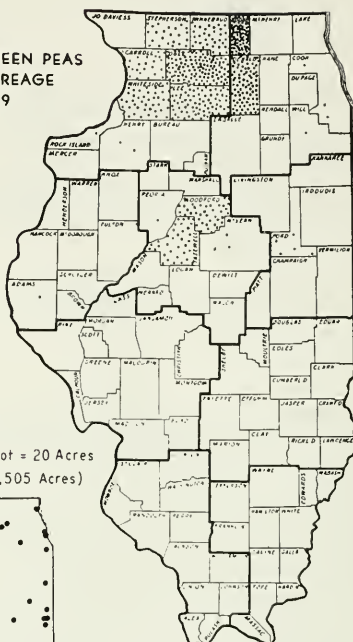
**SWEET CORN
ACREAGE
1939**

1 Dot = 20 Acres
(43,598 Acres)

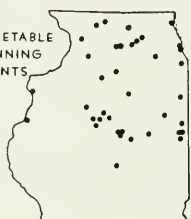


**GREEN PEAS
ACREAGE
1939**

1 Dot = 20 Acres
(11,505 Acres)

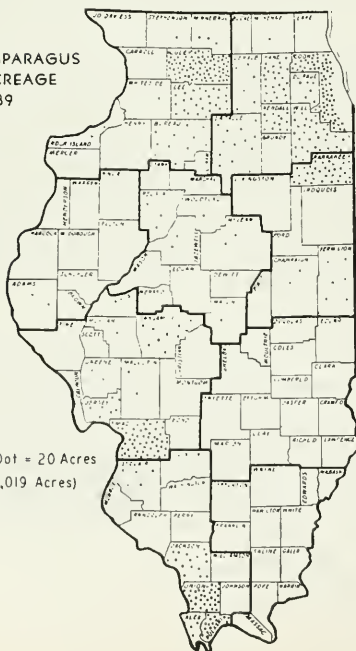


**VEGETABLE
CANNING
PLANTS**



**ASPARAGUS
ACREAGE
1939**

1 Dot = 20 Acres
(5,019 Acres)



**TOMATO
ACREAGE
1939**

1 Dot = 20 Acres
(9,935 Acres)

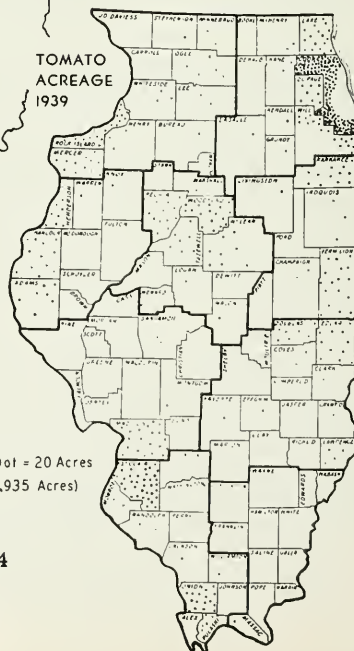


Figure 24

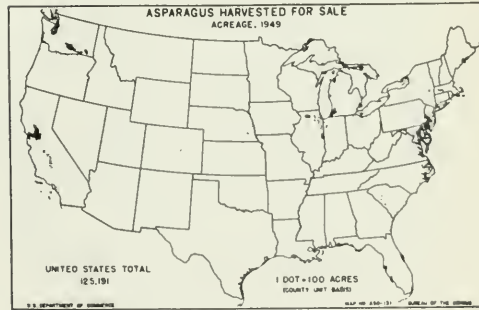
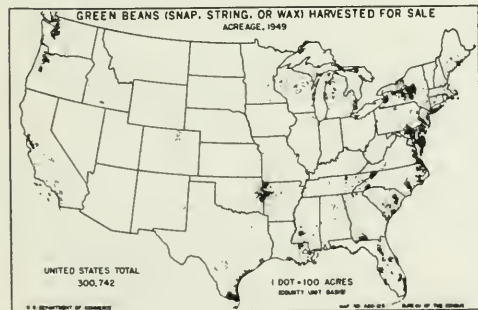
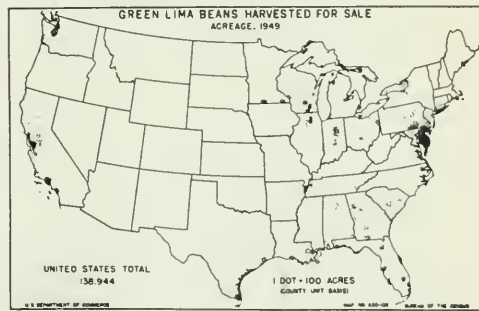
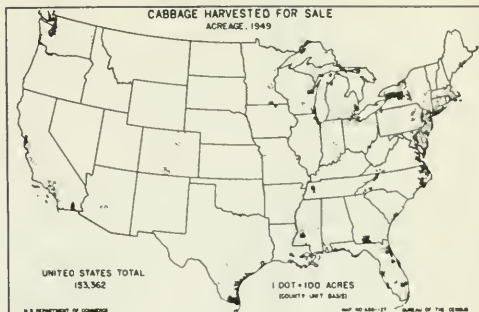
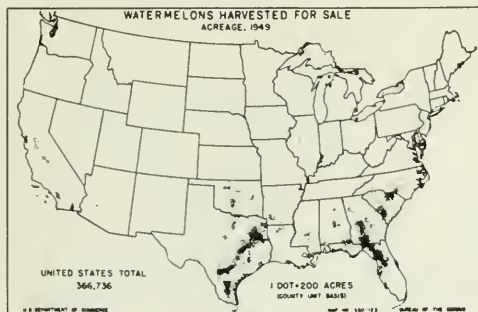


Figure 25

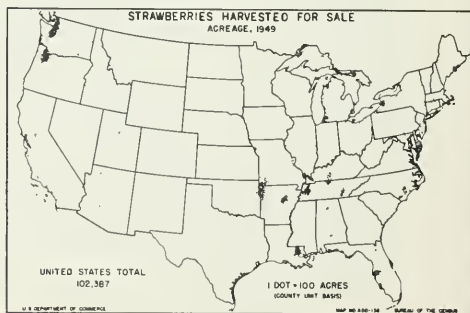
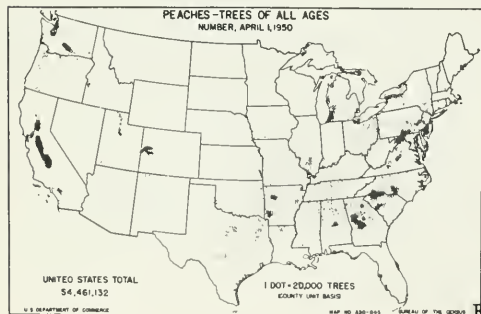
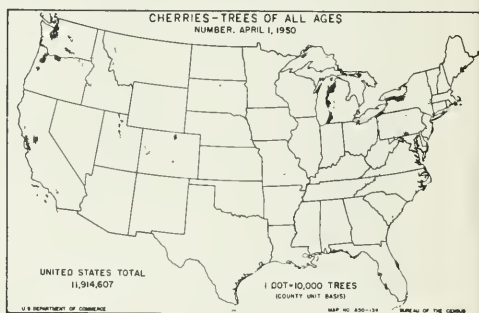
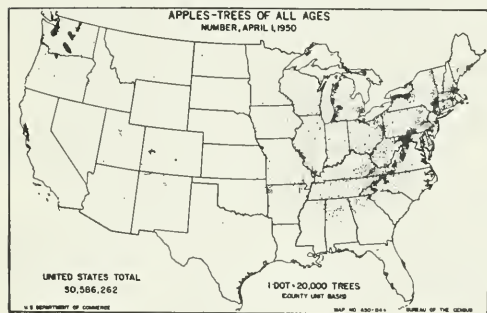
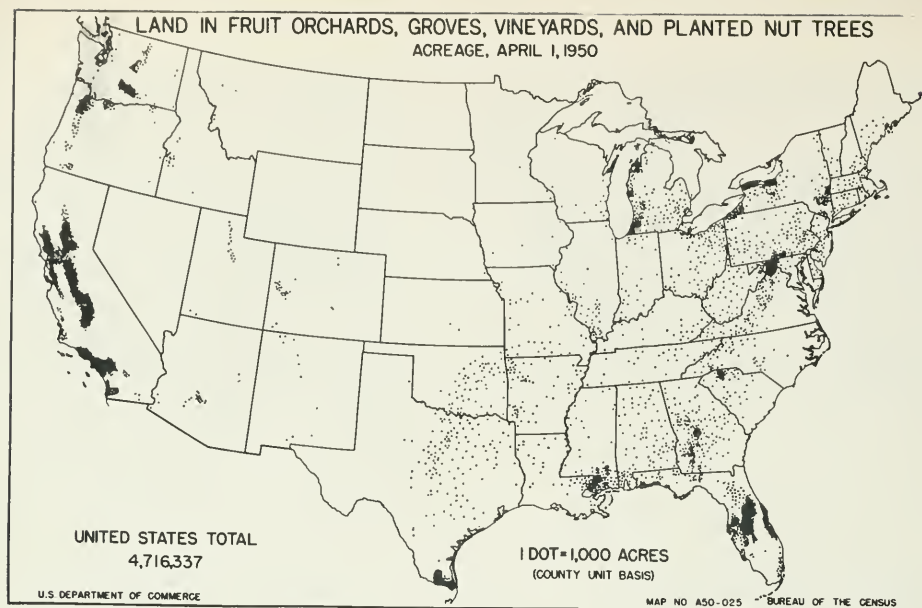


Figure 26

of Peoria's corn purchases come from Illinois, and the remainder from Iowa. The rye consumed locally comes principally from Minnesota.

Livestock -

The invention of the refrigerator car had a profound influence on livestock marketing. Live animals that had previously been sent to the eastern United States and European cities could be slaughtered nearer the source of supply and the dressed meat shipped. As a result, Illinois eventually became the meat packing center of the nation.

Livestock marketing in the city of Peoria is carried on through the Union Stock Yards. Another stock yards, Peoria Livestock Company, is located just south of the corporate limits of Peoria. These are the only local commercial markets for livestock in Peoria or Tazewell Counties.

Most livestock is shipped into Peoria from an area within a 75 to 100 mile radius of the city. Although some stock is trucked in from as far as Iowa and Missouri, the major portion of shipments received are from the near-by counties. At Peoria Union Stockyards, Peoria and Tazewell Counties account for 22.9% of the cattle receipts, 27.2% of the calves, 20.2% of the hogs, and 22.1% of the sheep. Other strong suppliers of the Peoria market are those counties lying immediately to the west and south of the city. *

Peoria's livestock receipts amount to somewhat over one-tenth on the state's receipts in terms of the value of animals. As Illinois is the leading market for livestock, this proportion is quite significant. Of more specific importance is the general trend in this area's marketing. Although the proportion of cattle receipts has fallen off slightly in the last seven years, cattle men here feel that the cause of this downward trend will be gradually eliminated. An imminently satisfactory trend is being established in the hog and sheep receipts in Peoria. The proportion of the Illinois market accounted for by Peoria has increased about 33% in the last seven years.

Although there are many other factors entering into the livestock marketing system, other than location of production, it is interesting to note the following comparison between livestock receipts and livestock on farms in the surrounding counties as tallied in table 6, page 51.

COMPARISON OF LOCAL PRODUCTION & MARKETING

	<u>Cattle</u>	<u>Hogs</u>	<u>Sheep</u>
Peoria's proportion of Illinois market in 1953 in per cent	7.8	14.6	14.8
Peoria area's proportion of Illinois animals on farm in 1953 in per cent	18.3	20.1	14.3

* Peoria Union Stockyards Company - Livestock Reports

LIVESTOCK MARKETING STATISTICS
Saleable Receipts - Union Stock Yards Only

	<u>1947</u>	<u>1948</u>	<u>1949</u>	<u>1950</u>
Cattle Marketed	140,067	119,025	122,040	119,268
Calves Marketed	45,596	44,925	36,648	29,575
Proportion of Illinois Receipts	9.6	9.9	9.3	8.4
Hogs	739,676	789,596	848,059	971,361
Proportion of Illinois Receipts	11.7	11.9	12.2	12.4
Sheep	74,147	88,698	74,145	60,654
Proportion of Illinois Receipts	11.1	12.5	12.4	10.4

	<u>1951</u>	<u>1952</u>	<u>1953</u>
Cattle Marketed	109,955	114,781	133,842
Calves Marketed	24,246	23,076	26,559
Proportion of Illinois Receipts	8.6	8.2	7.8
Hogs	1,084,647	1,161,157	1,004,318
Proportion of Illinois Receipts	13.1	13.8	14.6
Sheep	57,347	81,055	107,364
Proportion of Illinois Receipts	10.7	12.5	14.8

Total of Union Stock Yard & Peoria Livestock Company

	<u>Cattle & Calves</u>	<u>Hogs</u>	<u>Sheep</u>
1953*	173,263	1,116,304	109,996

* Total livestock saleable receipts in Peoria Metropolitan Area. This data not available prior to 1953.

Table 7

INDUSTRIAL PRODUCTS AVAILABLE

So far the descriptions of natural resources available in this geographic area have been confined to rather basic commodities covering chiefly mineral and agricultural products. The items that have been discussed are considered as raw materials for many primary manufacturing processes. In addition to these raw materials, most manufacturers require products that have had some phase of processing already performed. Thus, the availability of these industrial products in this area is a question of vital importance.

The most meaningful approach to this question lies in the simple enumeration of the types of industrial products now being processed in this area that are normally sold on contract. *

It is impossible to determine the actual extent of availability of locally produced industrial products as this condition is dependent on many variables that are constantly changing. It must suffice to indicate the presence of a source, leaving for a specific time and place the determination of the capacity of the source that is available.

Pages 58-63 contain a listing of all Peoria Metropolitan manufacturers grouped according to product. **

* As distinguished, for instance, from a captive foundry, with no past record of contracts outside the parent corporation.

** Bureau of Census Classifications.

PEORIA AND TAZEWELL COUNTY MANUFACTURERS

FOOD AND KINDRED PRODUCTS:

Albers Milling Company - Animal feeds
Allied Mills, Inc. - Livestock and poultry feeds
American Bio-Chemical Company, Inc. - Yeast
American Distillery Company - Liquor
Armour & Company - Packing house products
Bake-Rite Bakery - Retail bakers
Barth's Bakery - Retail bakers
Borland's Dairy - Milk and ice cream
Calihan & Company - Meat packers
Central City Pickle Company - Vinegar
Cereal Food Company - Canned fruits and vegetables
Corn Products Refining Company - Karo syrup, mazola oil, cornstarch
Church's Creamery - Dairy products
Dad's Root Beer - Bottlers of "Dad's Root Beer"
Daisy Ice Cream Company - Ice cream
Derges Bottling Company - Bottlers of "Squirt"
Dodd's Bakery - Retail bakers
Dr. Pepper Bottling Company - Bottlers of "Dr. Pepper"
East Side Baking Company - Bakers
Gipps Brewing Company - Beer, canned carbonated beverages
Glen Oak Bakery Company - Wholesale and retail bakers
Hiram Walker & Sons, Inc. - Alcoholic beverages
Howell's Beverage Company - Bottlers of root beer
Howe's Bakery, Inc. - Bakers of "Purity" bread
Kraft Foods Company - Cheese
McElwee Packing Company - Meat packers
Meadowbrook Farms Dairy - Dairy products
Melvin's Bakery - Retail bakers
Midland Bakeries, Inc. - Wholesale bakers
National Distillery Products Corporation - Alcoholic beverages
Nehi Bottling Company - Bottlers of Nehi beverages
Oakford Company - Coffee, syrup, food products
Omar, Inc. - Bakery goods
O-So-Grape Bottling Company - Soft drink ingredients
Pabst Brewing Company - Beer, refined yeast, malt
Pekin Dairy Company - Dairy products
Peoria Candy Company - Candy, fountain supplies
Peoria Coca-Cola Bottling Company - Bottlers of "Coca-Cola"
Peoria Creamery Company - Dairy products
Peoria Food Specialty Company - Potato chips, specialties
Peoria Producers Dairy, Inc. - Dairy products
Peoria Sausage Company - Meats
Peoria Service Company - Ice, cold storage

Pepsi-Cola Bottling Company - Bottlers of "Pepsi-Cola"
Prospect Bakery - Retail bakers
J. D. Roszell Company - Dairy products
Schulze Baking Company - Wholesale bakers
Schwab's Dairy - Dairy products
Shehan & Company - Meat packers
F. H. Soldwedel & Sons - Dairy products
Stafford's Dairy - Dairy products
Standard Brands, Inc. - Yeast, malt syrup, extracts
Sugar Creek Creamery Company - Dairy Products
Swift & Company - Meat packers
Zimmerman Dairy - Dairy products

TOBACCO MANUFACTURERS:

Mirex Cigar Company - Cigar

TEXTILE MILL PRODUCTS:

Peoria Cordage - Textile mill products, except twine

APPAREL & RELATED PRODUCTS:

Boss Manufacturing Company - Work gloves and mittens
Illinois Valley Awning Company - Awnings and canvas covers
Miller Belt Manufacturers - Belts and buttons
Peoria Tent & Awning Company - Canvas covers
Princess Peggy, Inc. - Cotton dresses

LUMBER & WOOD PRODUCTS (except furniture):

Carr & Johnston Company - Lumber and millwork
Fibre Partitions, Inc. - Fibre partitions
Maslow Cooperage Corporation - Barrels
Peoria Cabinet Company - Millwork
Peoria Planing Mill Company - Millwork
George J. Rothan - Millwork
Ruesch Sash & Door Company - Millwork, cabinets
Wahlfeld Manufacturing Company - Millwork

FURNITURE & FIXTURES:

Advance Shade & Blind Manufacturers - Venetian blinds
Altorfer Brothers Company - Washers and ironers
G. & G. Distributors, Inc. - Washer parts
H. B. McClure Manufacturing Company - Office equipment
Peoria Bedding Company - Manufacturers of mattresses
Pierson's Sanitary Mattress Company - Mattresses
Sanitary Mattress Company - Mattresses, couches, pillows
Universal Awning & Mattress Company - Awnings, bedding

PAPER & ALLIED PRODUCTS:

Bemis Brothers Bag Company - Paper shipping bags
Central Paper Box Company - Paper boxes

Humitube Manufacturing Company - Bags, straws, etc.
Peoria Paper Box Factory - Paper boxes
Quaker Oats Company - Paper products (for own use)

PRINTING, PUBLISHING, ETC.

Art Craft Engraving Company - Engravings
Fleming-Potter Company, Inc. - Printers and lithographers
Hennings & Company - Commercial printing
Edward Hine & Company - Commercial printers and publishers
International Color Printing Company - Color printing
Logan Printing Company - Printers
Loheide-Caswell Typesetting Company - Typesetting
Muirson Label Company, Inc. - Labels for canned goods
Peoria Engraving Company - Mats, plate engraving
Peoria Typesetting Company - Typesetting
South Side Printing Company - Job printing

CHEMICALS & ALLIED PRODUCTS:

Allaire, Woodward & Company, Inc. - Pharmaceuticals
Central Illinois Laboratories, Inc. - Soda, soda ash
Commercial Solvents Corporation - Chemicals, alcohols, solvents
Dawe's Products Company - Vitamins
Dust-All Manufacturing Company - Janitor supplies, polishes
Faber & Company - Hides, tallow
Hill, Luthy Company - Water softening compound
Linde Air Products - Oxygen, Acetylene, Carbide
Liquid Carbonic Corporation - Dry ice
Monarch Paint Company - Paint
National Cylinder Gas Company - Oxygen, Acetylene, Carbide, Nitrogen
Nitrose Company - Paint
Peoria Chemical Company - Chemicals, boiler compounds
Pure Carbonic, Inc. - Dry ice
Sutliff & Case Company, Inc. - Pharmaceuticals
Vitamineral Products Company - Supplements for livestock
Western Powder Manufacturing Company - Powder

PRODUCTS OF PETROLEUM & COAL:

Barrett Division, Allied Chemical & Dye Corporation - building and
roofing products
Reardon Products - Lubricant

LEATHER & LEATHER PRODUCTS:

Case & Kroenlein - Harness, saddlery and luggage

STONE, GLASS, & CLAY:

John Becker Cement Block Manufacturers - Concrete blocks
John Brooking & Son - Cement and concrete blocks
Chillicothe Gravel Company - Sand and gravel
East Peoria Sand & Gravel - Ready-mixed concrete

Enterprise Stone Company, Inc. - Cut stone
 Grant, Howard R. - Architectural iron works
 Hoffer Construction Company - Cement and concrete blocks
 Irion's Quality Concrete Company - Ready-mixed concrete and concrete;
 light weight blocks
 Kammerer Concrete Products - Drain, sewer, and culvert pipes
 Manito Filler Company - Minerals
 John Merkle & Sons - Monuments
 The Michigan Silo Company - Building blocks, coal shutes, basement sod
 Peoria Brick & Tile Company - Glazed bricks, drain tile
 Peoria Concrete Construction Company - Concrete blocks
 Peoria Monument Company - Monuments
 Peoria Stone & Marble Works, Inc. - Cut stone
 Ready-Mixed Concrete Company - Ready-mixed concrete
 Triebel & Sons - Monuments
 William Triebel Monument Company - Monuments

PRIMARY METAL INDUSTRIES:

Brass Foundry Company - Castings, patterns, machine work
 Excel Brass & Aluminum Foundry - Brass, bronze, and aluminum castings
 General Metals Company
 Illini Foundry Company - Non-ferrous castings
 Pekin Foundry & Manufacturing Company - Grey iron, castings
 Peoria Foundry - Grey iron, castings
 Peoria Malleable Castings Company - Chain
 South Side Foundry Company, Inc. - Grey iron, castings
 Superior Foundry Company - Brass and aluminum castings

FABRICATED METAL PRODUCTS:

Avery Farm Machinery - Oil burners
 Beeson Tank Company, Inc. - Oil tanks
 J. H. Benedict Company, Inc. - Tools, dies, gauges
 Broderick & Bascom Rope Company - Wire rope, galvanized strand
 Ceco Steel Products Corporation - Corrugated roofing, posts, etc.
 Central Plating Company - Copper, lead, zinc, aluminum
 Champion Furnace Pipe Company - Furnace pipe and fittings
 Climate Control Corporation - Furnaces, tanks
 M. H. Detrick Company - Iron castings
 Dooley Brothers - Miners' drills and tools
 Illinois Culvert & Tank Company - Stock tanks, feeders
 Industrial Tool & Die Company - Tools and dies
 Interlocking Fence Company - Fencing
 Keystone Steel & Wire Company - Fencing, wire, nails
 King Machine Works - Tools, dies, light manufacturing
 W. A. Laidlaw Wire Company - Coat hangers, springs, fly swatters
 A. Lucas & Sons - Arch iron works, steel warehousing
 Maple City Stamping Company - Metal tables, stools, rakes
 Marcus Machine & Iron Works - Machinists and iron workers
 F. Meyer & Brothers Company - Furnace pipe fittings

Meyer Furnace Company - Furnaces and air-conditioning equipment
Don Moore Sheet Metal Works - Sheet metal products
Mt. Hawley Manufacturing Company - Oil burners, agricultural equipment
Murphy & Walsh - Steel tanks
National Aluminum Manufacturing Company - Molded aluminum ware
L. R. Nelson Manufacturing Company - Sprinkling equipment
Northern Steel & Stoker Corporation - Coal stoves, blowers
Pekin Machine & Parts Company, Inc. - Auto machine shop
Pekin Specialty Company - Wire forms and frames
Peoria Copper Works - Tanks, coils, distilling equipment
Peoria Metal Specialty Company - Kitchenware, sheet metal goods
Peoria Plating Company - Copper, lead, zinc, aluminum
Rohn Manufacturing Company - Antenna towers
Sheet Metal Products Company - Sheet metal products
Standard Sheet Metal Works - Sheet metal products
Stoker-Ola Manufacturing Company - Stokers
Tazewell Machine Works - Non-ferrous castings

MACHINERY:

Auto Electric & Brake Service - Agricultural implements and machinery
Caterpillar Tractor Company - Heavy machinery
F. & M. Manufacturing Company - Carjacks, hydraulic hoists
Hart-Carter Company - Manufacturers of grain handling equipment
C. J. Hartley Company - Pumps
R. Herschel Manufacturing Company - Repair parts for agricultural implements
Hyster Company - Heavy earthmoving equipment, hoists, lifts
LeTourneau-Westinghouse - Earthmoving equipment
Little Giant Products, Inc. - Truck equipment, sweepers, loaders
Meyer Manufacturing Company - Agricultural equipment, loaders, hoists
Micro Products Company - Welding equipment
Peoria Steel & Wire - Welding equipment, fertilizer spreaders
Schelm Brothers - Corn shellers, commercial driers

ELECTRICAL EQUIPMENT:

Electreat Manufacturing Company - Electric massage equipment
Hendricks Electric Company - Electrical apparatus
Radio Manufacturers Engineers, Inc. - Radio equipment
Red Diamond Battery Manufacturing Company - Red Diamond Batteries
Ruesch Electric Company - Fluorescent signs
Tonemaster Manufacturing Company - Hearing aids

TRANSPORTATION EQUIPMENT:

Metzger's Inc. - Trailers
Pfaffman Manufacturing Company - Truck bodies

MISCELLANEOUS:

Bard \$9.50 Optical Company - Optical goods
K. L. Burgett Company - Golf gloves and club head covers

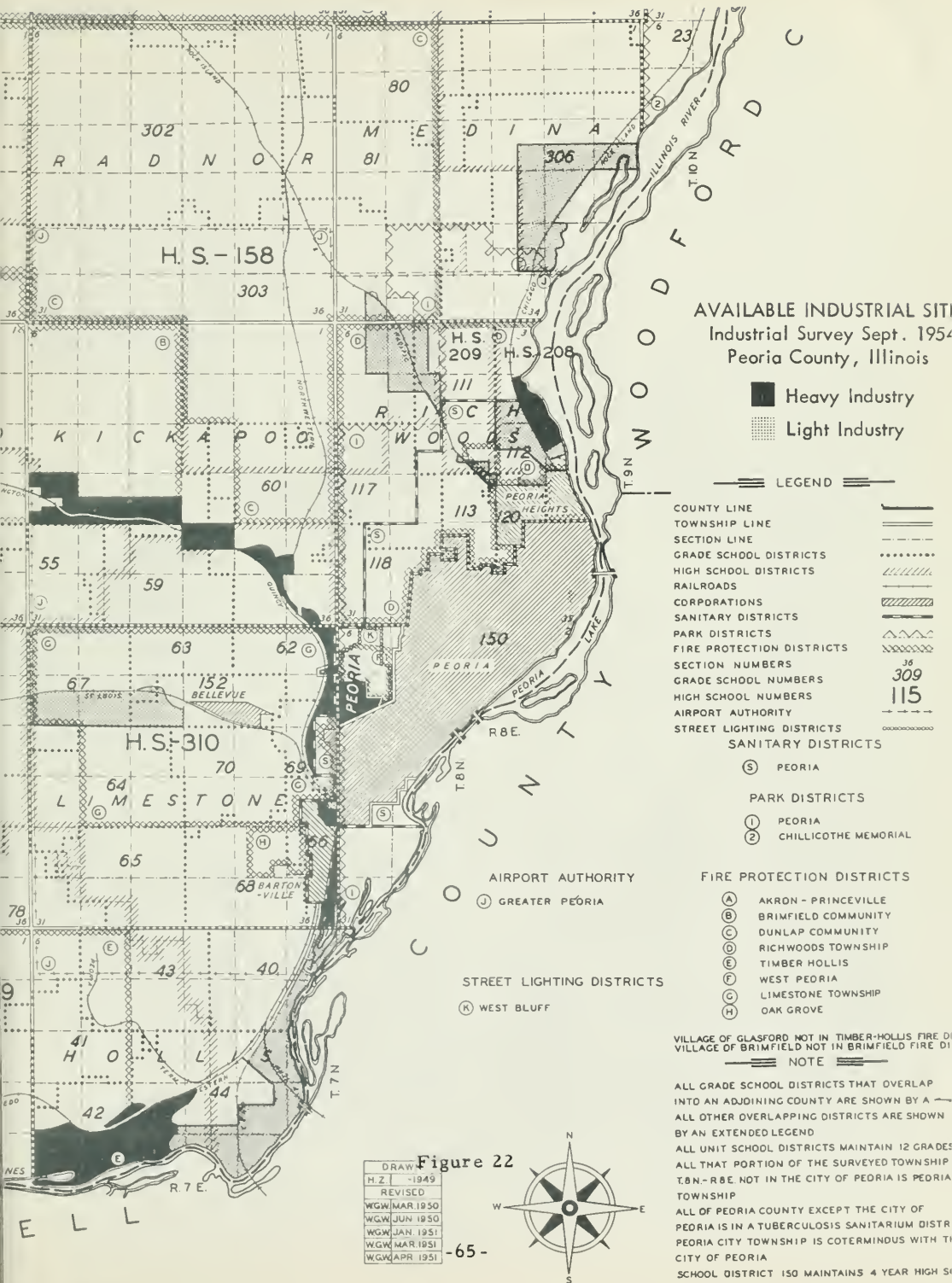
Gam Sales Company - Punchboards, etc.
C. M. Hill Company - Golf gloves and club head covers
Home Comfort Manufacturing Company - Ventilating Louvers
Joint Manufacturing Company - Orthopedic Appliances
Rudolph B. Jungst, Jr. - Artificial limbs
Modern Pattern Works, Inc. - Wood and metal patterns
Morton Pottery Company - Pottery
Phillip S. Olt - Game and bird calls
Peoria Casket Company - Casket manufacture
Peoria Plastic Company - Plastic articles
Reliable Pattern & Machine Works - Patterns, wood and metal
E. M. Smith Company - Machine shop, patterns

INDUSTRIAL SITES AVAILABLE

As the Peoria Metropolitan Area covers a large territory, it is best to present the discussion of the availability of industrial sites on the basis of the counties involved. The city and county of Peoria have independent zoning laws controlling land utilization. Thus the industrial sites that are available here are restricted to those areas zoned for this purpose. See the map in figure 22 on page 65. For a detailed description of the terms of these regulations, refer to the Real Estate and Construction section of this report, page 331.

Tazewell County at the present time has no zoning ordinance, nor do any of the cities lying in that County. Thus the availability of industrial sites here is a much more nebulous commodity. It must suffice for this study to merely point out some representative property.

The suitability of the various sites is, of course, dependent on the needs of the particular industry. However, a general appraisal of the utility of a site for industrial purposes may be had by noting the characteristics of the land and of the services provided in each instance. Such questions as availability of transportation, power, water, fuel, and sanitary services, land topography, etc., must all be evaluated in arriving at a final appraisal of suitability. An attempt has been made to provide some measure of information of this sort by including a map of the area, figure 23 on page 66, showing geographic location of sites and, where practical, the various services available at each. A more detailed description of the land may be had by referring to the section on pages 67, 68, and 69.



INDUSTRIAL SURVEY SEPT 1954

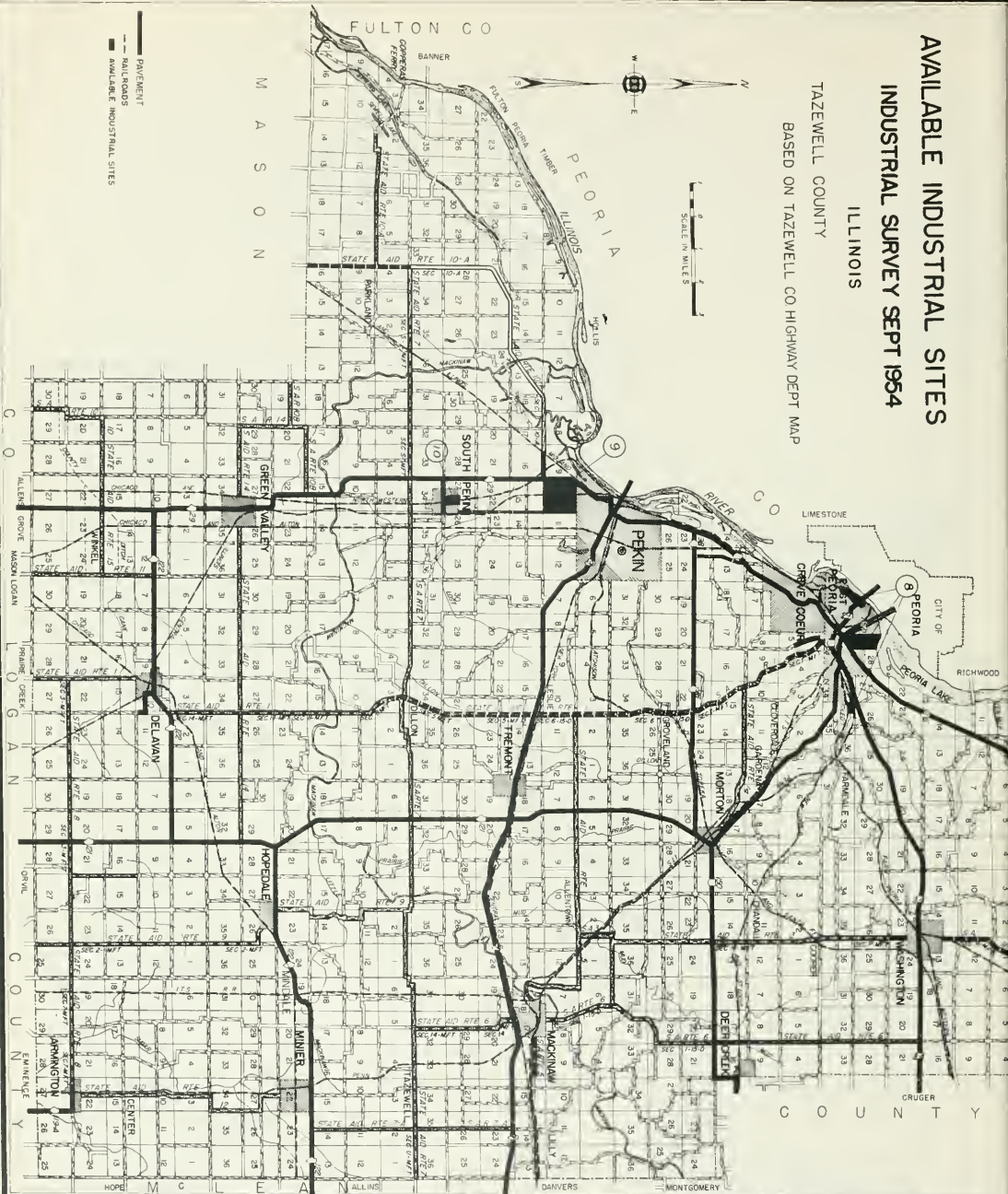


Figure 23

SUMMARY RATING OF LAND

TRANSPORTATION

PROPERTY

Description	Less Than 500 Acres	Size 500-1000 Acres	Over 1000 Acres	Zoned for Industry	Highway-Major, State or U. S.		Railroad			Water
					East-West	North-South	East-West	North-South	In Peoria-Pekin Switching dist.	
Mossville			X		X	X		X		X
Mount Hawley			X		X	X		X		
Galena Road	X			X		X		X		X
Kickapoo			X	X	X			X		
Peoria River Front	X			X	X	X	X	X	X	X
Bartonville			X	X		X		X	X	X
Maxwell Station		X			X		X			
East Peoria	X				X	X	X	X	X	X
Pekin		X				X		X	X	
South Pekin		X				X		X		

SUMMARY RATING OF LAND

(continued)

(Continued)

T O P O G R A P H Y					W A T E R S U P P L Y			W A S T E D I S P O S A L F A C I L I T I E S		
Description	Flat	Mildly Rolling	Severe Contours	Requires Flood Protection	Limited	Adequate	Abundant	River Front	Sanitary System	None Avail- able
Mossville	X	X		X			X	X		
Mount Hawley		X	X		X					X
Galena Road	X	X		X		X		X	X	
Kickapoo		X	X	X			X	X		
Peoria River Front	X			X	X			X	X	
Bartonville	X	X		X	X			X		
Maxwell Station		X	X		X					X
East Peoria	X			X	X				X	
Pekin	X						X		X	
South Pekin	X						X			

SUMMARY RATING OF LAND

(continued)

Description	E L E C T R I C P O W E R		G A S		F I R E P R O T E C T I O N		
	Available	Not in Immediate Vicinity	Available	Not in Immediate Vicinity	Mains and/or Hydrants	Fire Fighting Equipment City	Township*
							Within 2 mile and 10 mile
Mossville	X			X			X
Mount Hawley	X			X			X
Galena Road	X		X		X		X
Kickapoo		X		X		X	
Peoria River Front	X		X		X	X	
Bartonville	X		X			X	X
Maxwell Station	X		X			X	
East Peoria	X		X		X	X	
Pekin	X		X				
South Pekin	X				X	X	

* Firefighting Equipment stationed within 2 miles is regarded as effective, between 2 and 10 miles it has some value, but over 10 miles is useless. (#22)

DETAILED DESCRIPTION OF INDUSTRIAL SITES

1. Peoria County -

Slightly more than two sections of land north and east of Mossville is presently zoned for light industry. The most attractive portion of this parcel lies north of Mossville and east of State Route 29 and the Rock Island Railroad right of way. Sections 26 and 35 could be conditioned for industrial use by construction of levees if water transportation were an essential requirement. There are some problems in this connection, however, posed by the distance of the river channel from the west shore line of the river.

The topography of the property included in sections 14, 15, 22, and 23 that are zoned for industry is well suited for industrial purposes. For the most part the maximum difference in elevation here is 30 feet running from a high of 500 feet to 470. Most of the property slopes gently towards the river. See map on page 71.

Transportation: This parcel is served by the Rock Island Railroad, four highways - State Route 16, 25, 29, and 55 - and the Illinois River.

Water Supply and Waste Disposal: The water supply in this area is exceptionally good. Tests made by the State Water Survey indicate an abundant source of ground water. The proximity of the river provides both an adequate source of surface water and an economical outlet for treated waste disposal.

Electric Power and Gas: Central Illinois Light Company electric power transmission lines pass through this area at 14.4 Kilovolts, thus providing adequate power for industrial purposes. Gas mains currently extend to the Muirson Label Company about four miles below Mossville.

Fire Protection: At the present time this area has no organized water distribution network and, therefore, no fire protection water mains or hydrants. Fire fighting equipment from the city of Chillicothe, located about five miles north of this parcel, is available to the area on a private subscription basis.

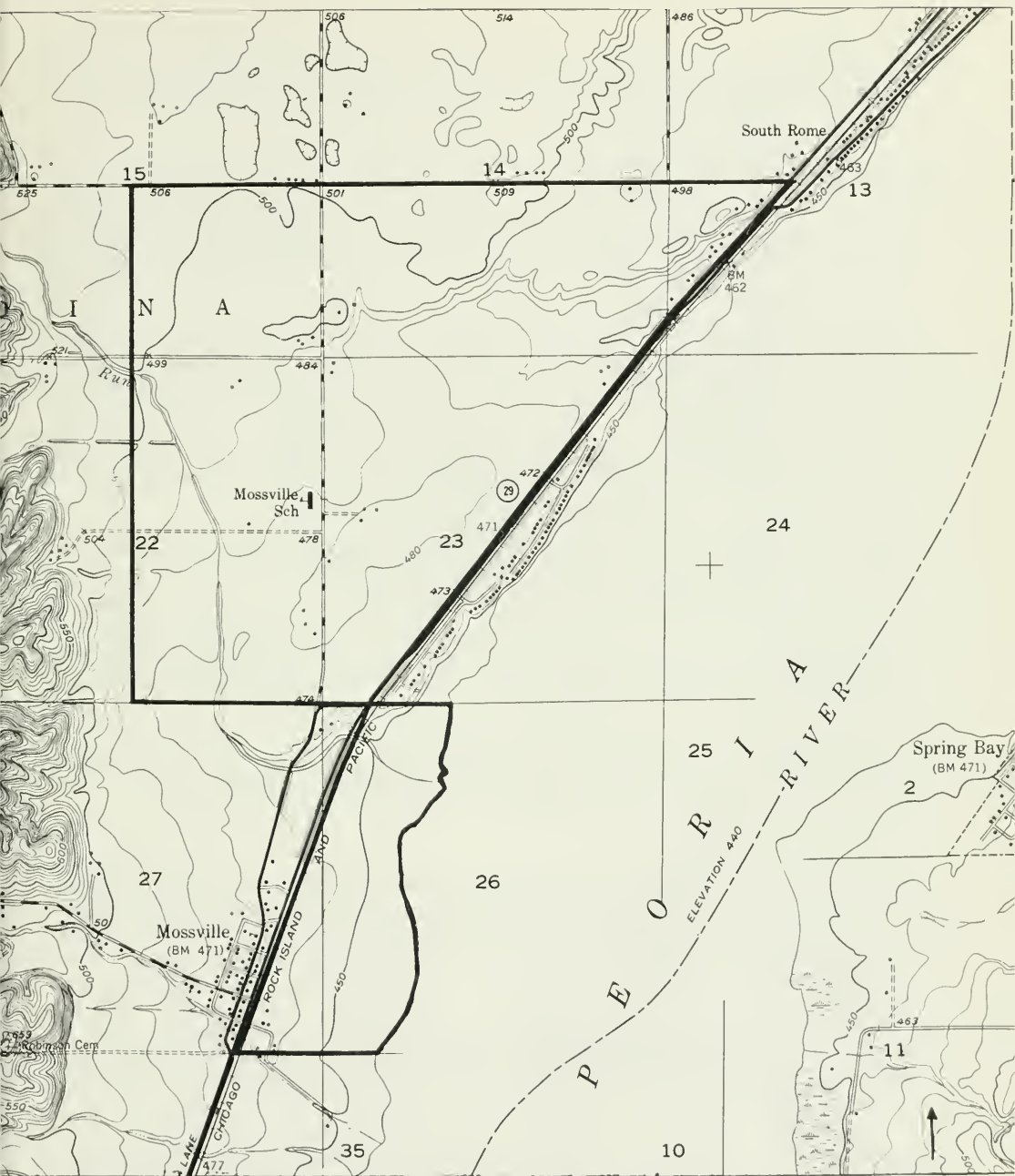
Availability: At the time of this writing all of this property appears to be available. Most of the land is now under cultivation.

2. Mount Hawley District -

Almost two sections of land are zoned for light industrial use in the area bordering the Rock Island Railroad, extending from Mount Hawley Airport southwest to Alta.

The topography of the zoned portions of sections 5, 6, and 8 is well suited for most industrial purposes. The elevation runs from a maximum of 800 feet down to 760 over an area of more than 800 acres, providing for gentle sloping contours.

1. MOSSVILLE PARCEL TOPOGRAPHIC DETAILS



For Mapping Details and Source see Parcel Map 3.

The zoned portion of section 31 has greater extremes of elevations. This land is drained by a creek running slightly east of the railroad right of way, a condition that causes more pronounced hills and valleys in the zoned section. See map on page 73.

Transportation: This area is well served by transportation facilities. Good highways permitting entrance and egress in all four directions border the property. State Route 174 accommodates east-west traffic, and State Route 88 north-south. The Rock Island Railroad's line running from Peoria to its east-west trunk line at Colona passes through the area (see Transportation Section for freight schedules and rates).

Water Supply and Waste Disposal: Ground water for this area would probably have to be supplied by the Sankoty field near the Illinois River about two miles southeast of the Mount Hawley property, or from the ground water field under the Mossville area about two and one-half miles northeast.

Small amounts of sanitary or industrial wastes may be disposed of fairly readily in this area. However, the terrain does not provide for river connected drainage which might be necessary for large volumes of waste.

Electric Power and Gas: 14.4 K. V. electric power transmission lines are presently in this area. The present terminal of the nearest gas main is about one and one-fourth miles southeast of this property.

Fire Protection: There are no mains or hydrants in this area. The major portion of this light industrial zoned area lies within the Richwoods Township fire protection district. This district has fire fighting equipment located at El Vista, about four miles to the south.

Availability: All but a few acres, now being used by industrial and commercial purposes, is under cultivation and can be regarded as available.

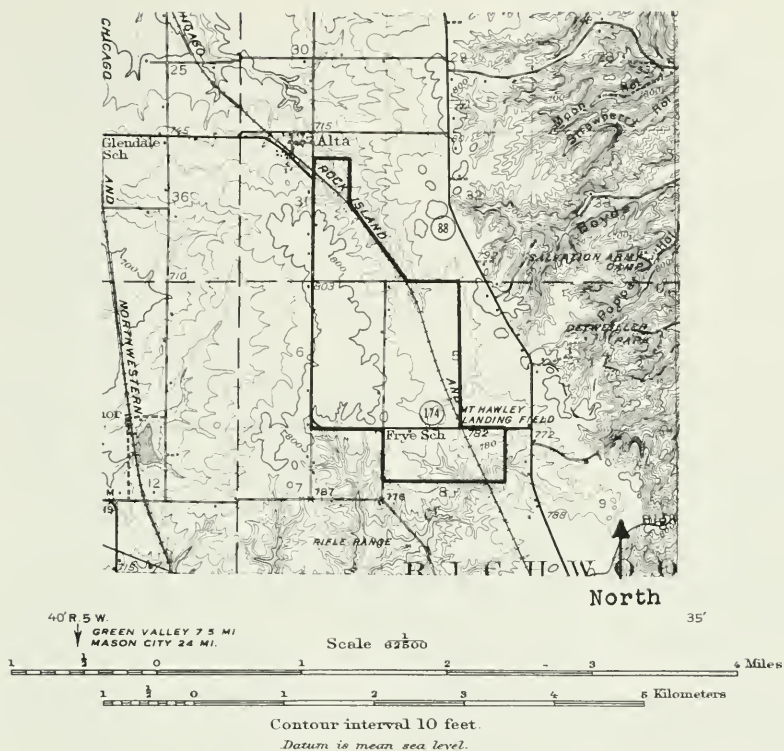
3. Galena Road District -

Area zoned for both light and heavy industry is available on Galena Road in Richwoods Township about one-half mile north of Peoria Heights. On the river side of the highway is approximately 150 acres of light industry area, and 400 acres of heavy. On the opposite side of the highway about 200 acres are zoned for light industry.

The land on the river front is fairly flat, running from an elevation of about 445 feet at the shoreline to 470 feet at the highway. At least half of this river front property (below 460 feet elevation) would more than likely require levee protection from flooding.

The parcel of land that is available on the west side of the road lies in a flat terrain, there being approximately 10 feet change in elevation over the entire property.

2. MOUNT HAWLEY PARCEL TOPOGRAPHIC DETAILS



Above scale is for Parcel maps 2, 4, 5, 6 and 9.

Source for Parcel
Maps 2,4,5,6 and 9:

Topography by C.R.Fisher, H.E.Simmons, W.F.Chenault,
R.L.McCammon, C.D.Mitchell, and J.A.Law
Culture and drainage in part compiled from aerial photographs
taken by Air Corps, U.S. Army
Control by U.S. Geological Survey, Corps of Engineers, U.S. Army,
and from railroad valuation surveys
Surveyed in 1929-1930 and 1933
Culture revised in part 1948

TRUE NORTH
MAGNETIC NORTH
APPROXIMATE
DECLINATION

Land within heavy border on all maps of Peoria County is
zoned for industrial use.

Transportation: Good highway, railroad, and water transportation facilities are available to this district. State Route 29, a four-lane divided road at this point, provides excellent highway service. The Rock Island Railroad Bureau-Peoria right of way bisects the property and, as there is river frontage available, water transportation is possible at this point. It is of economic importance from the standpoint of river transportation to note that the river channel approaches the west bank of the river in this area, making docking and ship facilities economically quite feasible.

Water Supply and Waste Disposal: This district lies directly over the Sankoty water field which is capable of providing a considerable supply. Although no water pool is inexhaustible, present demands on Sankoty are not extremely heavy and future plans of the Peoria Water Department include the installation of a filter pit whose operation would alleviate the present demands on the Sankoty field.

The Greater Peoria Sanitary District has a main extending to this district (see map, figure 24 page 93) which could adequately handle most industrial problems. For large producers of industrial waste the proximity of the river permits economic disposal of treated effluent. Answers to general questions regarding operation and policy of the Sanitary District may be had by referring to the description on page 91 of this report.

Power and Light: 14.4 Kilovolt transmission lines are available here, currently having an adequate surplus of capacity. This district is the present terminal of one of the Central Illinois Power Company's fuel gas mains. (For gas availability and customer policy, see company statements, page 70.

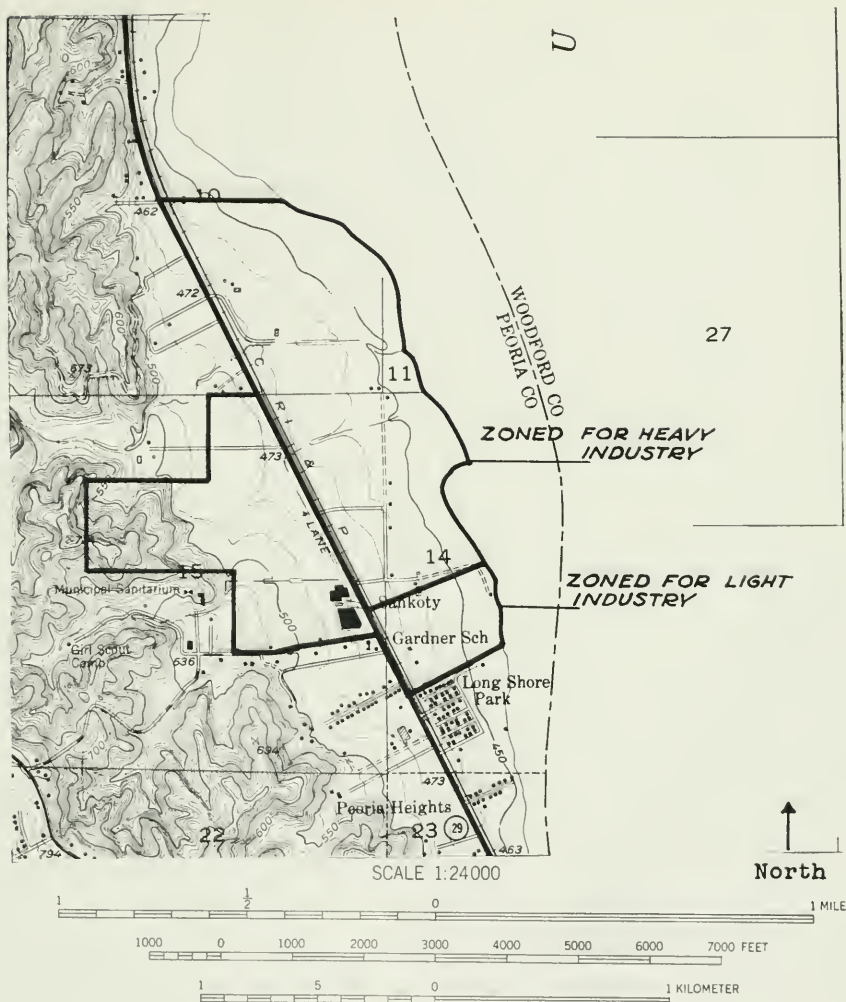
Fire Protection: At present there is a fire main running to the lower (southern) edge of this district. There are few hydrants located here now, but their installation is not relatively costly. The fire-fighting equipment for this district is the same that serves the Mount Hawley district as it is also in the Richwoods Fire Protection District. The equipment is located in the village of El Vista, approximately four miles away.

Availability: All of the property on the river front extending to the highway (zoned for heavy and light industry) is available. On the west side of the highway, only one parcel of 18 acres is available at this time. However, the successful operation of the filter pit to be installed by the Water Company south of this land may make more of this property available in the future.

4. Kickapoo Creek District -

Slightly less than five sections (approximately 3,000 acres) of land are zoned for heavy industrial use in this district. The topography of the area is such that it has been necessary to make a special map of this land. Of the land available in the Kickapoo Creek Valley from the town of Edwards down to Bartonville there are but 425 acres presently not subject to flooding. Of these 425 protected

3. GALENA ROAD PARCEL TOPOGRAPHIC DETAILS



SCALE 1:24000
CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

The scale and mapping details are those used for Parcel Maps 1,3,7 and 8.

Mapped, edited, and published by the Geological Survey
Control by USGS and USC&GS

Topography by multiplex methods from aerial photographs taken 1946, and by plane-table surveys 1948-1949
Field check 1948-1949

Polyconic projection. 1927 North American datum
10,000-foot grid based on Illinois coordinate system, west zone

GALENA ROAD DISTRICT

ZONING BOARDER

OMAR BAKERY

HEAVY INDUSTRY

SAN KOTY SUBSTA.

LIGHT INDUSTRY

15

MUIRSON LABEL

14.4 KV
6" WIRE
SAN KOTY

6" WIRE
GAS

50' R/S

acres only slightly more than 200 acres are zoned for industrial purposes. This land that can be utilized is, for the most part, available only in relatively small parcels. (See map, parcel 4-A on page 79.) The proposed Kickapoo Retention Dam would make available in the area that is now industrially zoned about five times the amount of land which is available at present.

Transportation: The area from Pottstown to Edwards is served by both highway and railway. State Route 8, running predominantly north and south, bisects almost all of the district. There are two railroads running on adjacent tracks up the creek valley from Peoria through Pottstown. However, they part here, the Chicago North Western going directly north and the Chicago, Burlington and Quincy continuing to follow up along the creek valley to a point beyond Edwards. For freight schedules and service on these lines, see the section on Transportation on page 246

Water Supply and Waste Disposal: Although not currently served by the Peoria Water Department, this district has an abundant supply of ground water situated under it.

The area is a considerable distance from the present facilities of the Greater Peoria Sanitary District (see map on page 93); however, the creek provides for ready disposal of treated effluent.

Power and Gas: The Central Illinois Light Company now has a 14.4 Kilovolt transmission line passing through Edwards. However, there are no facilities currently available for heavy industrial power users in the valley between Edwards and Bartonville. The present electrical distribution network in this area under study is for purposes of farm service only.

There are no fuel gas supply facilities between Pottstown and Edwards. The nearest gas mains available to this valley are near the mouth of the creek at Bartonville.

Fire Protection: There are no fire mains or hydrants in any of this district. The entire area from Pottstown to Edwards is in the Brimfield Fire Protection District, which has equipment stationed at the town of Brimfield, about eleven miles away.

Availability: With the exception of a few acres now used for industrial purposes near the intersection of the upper branch of Route 116 and the C. B. & Q. tracks, all of the zoned area in this district may be considered as available.

5. City of Peoria Water Front -

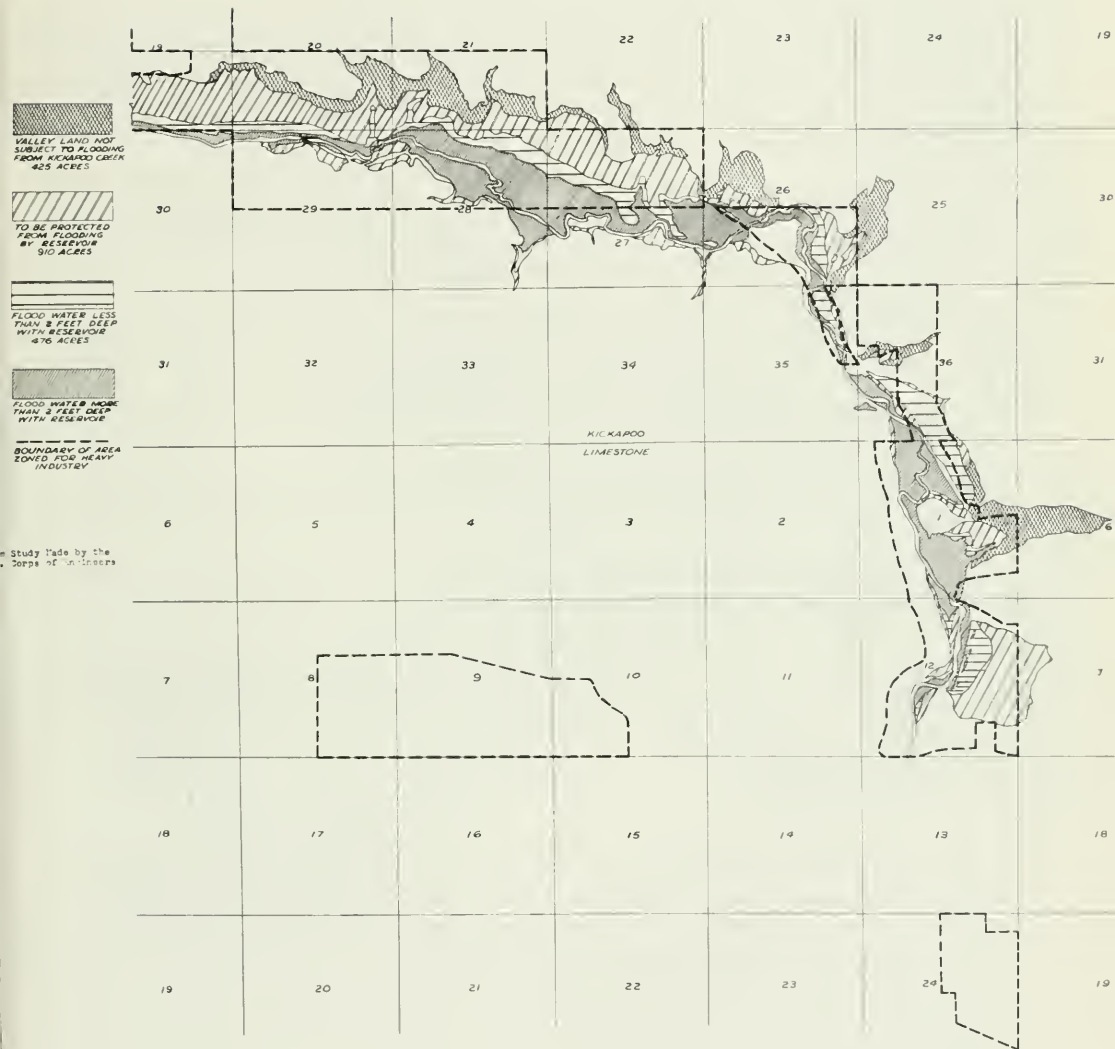
The entire river front of the City of Peoria is zoned for industrial uses. (See the map in figure 23, page 66.) There are various parcels of property available on or near the river front in Peoria. These range in size from plots as large as approximately 20 acres to those as small as city lots. The major portion of the

This is a detailed topographic map of the Kewanee area in Illinois. The map features the Kewanee River flowing through the center, with Kewanee Creek branching off to the west. Major towns and locations labeled include Chicago, Burlington, Quincy, Kewanee, and Kewanee. The map also shows the Kewanee River, Kewanee Creek, and surrounding towns like Chicago, Burlington, Quincy, and Kewanee. The map includes contour lines, roads, and a grid system.



Source: See Parcel Map 2.

EFFECT OF KICKAPOO CREEK ON LAND ZONED FOR INDUSTRIAL USE



Parcel 4-A

available property is in the southern portion of the city. (See map on page 81.) The available parcels of property within the corporate limits of the city have such diverse characteristics that it is impossible to treat the district in general terms. An idea of size, shape, and topographical characteristics may be had from referring to the map on page 81 as mentioned above.

Transportation: Perhaps the most significant transportation advantage offered by this area accrues from the fact that it lies within the Peoria-Pekin switching district. This district offers the advantage of lower rates under certain conditions and greater frequency of freight service. (See page 260 for a detailed description.)

River transportation can be utilized in some cases on available properties. Most plots have roads running through or adjacent to the property. Again to evaluate the desirability of this district it is necessary to study the plots on an individual basis from the material contained in figure 22, page 65.

Water Supply and Waste Disposal: For details of the characteristics of the available water service for this district, refer to section 8, page 190 on Water Supply.

Detailed information is also available on the service offered by the Sanitary District within which this property lies. For this material refer to page 91.

Power and Light: An adequate supply of electrical power is available throughout the entire district. For details on this and on gas service, see page 117.

Fire Protection: Peoria is presently a class four city for fire insurance rates. An attempt by the city administration is now being made to improve this rating to class three (see discussion, section 16, page 454). For information on fire-fighting equipment, see page 454. Most of the area under study is served by fire protection mains and hydrants. In the few cases in which hydrants are not in the immediate vicinity, there are nearby mains to which hydrants can be economically connected.

6. Bartonville District -

This district extends from the southern limits of the City of Peoria to Kingston Mines, and includes land zoned for both heavy and light industry. This is the largest continuous area of land zoned for industrial purposes in the Peoria area. There is some variation in the topography included in this district. The property between Peoria and Bartonville is naturally rather low and a substantial portion of it is subject to flooding. However, about 120 acres on either side of State Route 24 are either already or are now being filled to a level high enough to ameliorate this condition. The available property just south of the Peoria Sewage Disposal Plant and east of the Keystone Plant is almost all subject to flooding. The elevation ranges from 440 feet to 450 feet. The recommended protection level from the Illinois River in this locality is 460 feet. This subjectivity to flooding is fairly typical of all of the land extending from the area mentioned above a

A detailed topographic map of Peoria, Illinois, and its surrounding areas. The map shows the city of Peoria, Peoria Heights, and the Peoria River. Key features include:

- Geographical Labels:** RICHWOODS, Peoria Heights, PEORIA, PEORIA RIVER, and Peoria City Limits.
- Infrastructure:** Major roads (e.g., 150, 24, 29, 116, 416, 324) and a railway line.
- Topography:** Contour lines indicating elevation, with labels such as 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260, 270, 280, 290, 300, 310, 320, 330, 340, 350, 360, 370, 380, 390, 400, 410, 420, 430, 440, 450, 460, 470, 480, 490, 500, 510, 520, 530, 540, 550, 560, 570, 580, 590, 600, 610, 620, 630, 640, 650, 660, 670, 680, 690, 700, 710, 720, 730, 740, 750, 760, 770, 780, 790, 800, 810, 820, 830, 840, 850, 860, 870, 880, 890, 900, 910, 920, 930, 940, 950, 960, 970, 980, 990, 1000, 1010, 1020, 1030, 1040, 1050, 1060, 1070, 1080, 1090, 1100, 1110, 1120, 1130, 1140, 1150, 1160, 1170, 1180, 1190, 1200, 1210, 1220, 1230, 1240, 1250, 1260, 1270, 1280, 1290, 1300, 1310, 1320, 1330, 1340, 1350, 1360, 1370, 1380, 1390, 1400, 1410, 1420, 1430, 1440, 1450, 1460, 1470, 1480, 1490, 1500, 1510, 1520, 1530, 1540, 1550, 1560, 1570, 1580, 1590, 1600, 1610, 1620, 1630, 1640, 1650, 1660, 1670, 1680, 1690, 1700, 1710, 1720, 1730, 1740, 1750, 1760, 1770, 1780, 1790, 1800, 1810, 1820, 1830, 1840, 1850, 1860, 1870, 1880, 1890, 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1980, 1990, 2000, 2010, 2020, 2030, 2040, 2050, 2060, 2070, 2080, 2090, 2100, 2110, 2120, 2130, 2140, 2150, 2160, 2170, 2180, 2190, 2200, 2210, 2220, 2230, 2240, 2250, 2260, 2270, 2280, 2290, 2300, 2310, 2320, 2330, 2340, 2350, 2360, 2370, 2380, 2390, 2400, 2410, 2420, 2430, 2440, 2450, 2460, 2470, 2480, 2490, 2500, 2510, 2520, 2530, 2540, 2550, 2560, 2570, 2580, 2590, 2600, 2610, 2620, 2630, 2640, 2650, 2660, 2670, 2680, 2690, 2700, 2710, 2720, 2730, 2740, 2750, 2760, 2770, 2780, 2790, 2800, 2810, 2820, 2830, 2840, 2850, 2860, 2870, 2880, 2890, 2900, 2910, 2920, 2930, 2940, 2950, 2960, 2970, 2980, 2990, 3000, 3010, 3020, 3030, 3040, 3050, 3060, 3070, 3080, 3090, 3100, 3110, 3120, 3130, 3140, 3150, 3160, 3170, 3180, 3190, 3200, 3210, 3220, 3230, 3240, 3250, 3260, 3270, 3280, 3290, 3300, 3310, 3320, 3330, 3340, 3350, 3360, 3370, 3380, 3390, 3400, 3410, 3420, 3430, 3440, 3450, 3460, 3470, 3480, 3490, 3500, 3510, 3520, 3530, 3540, 3550, 3560, 3570, 3580, 3590, 3600, 3610, 3620, 3630, 3640, 3650, 3660, 3670, 3680, 3690, 3700, 3710, 3720, 3730, 3740, 3750, 3760, 3770, 3780, 3790, 3800, 3810, 3820, 3830, 3840, 3850, 3860, 3870, 3880, 3890, 3900, 3910, 3920, 3930, 3940, 3950, 3960, 3970, 3980, 3990, 4000, 4010, 4020, 4030, 4040, 4050, 4060, 4070, 4080, 4090, 4100, 4110, 4120, 4130, 4140, 4150, 4160, 4170, 4180, 4190, 4200, 4210, 4220, 4230, 4240, 4250, 4260, 4270, 4280, 4290, 4300, 4310, 4320, 4330, 4340, 4350, 4360, 4370, 4380, 4390, 4400, 4410, 4420, 4430, 4440, 4450, 4460, 4470, 4480, 4490, 4500, 4510, 4520, 4530, 4540, 4550, 4560, 4570, 4580, 4590, 4600, 4610, 4620, 4630, 4640, 4650, 4660, 4670, 4680, 4690, 4700, 4710, 4720, 4730, 4740, 4750, 4760, 4770, 4780, 4790, 4800, 4810, 4820, 4830, 4840, 4850, 4860, 4870, 4880, 4890, 4900, 4910, 4920, 4930, 4940, 4950, 4960, 4970, 4980, 4990, 5000, 5010, 5020, 5030, 5040, 5050, 5060, 5070, 5080, 5090, 5100, 5110, 5120, 5130, 5140, 5150, 5160, 5170, 5180, 5190, 5200, 5210, 5220, 5230, 5240, 5250, 5260, 5270, 5280, 5290, 5300, 5310, 5320, 5330, 5340, 5350, 5360, 5370, 5380, 5390, 5400, 5410, 5420, 5430, 5440, 5450, 5460, 5470, 5480, 5490, 5500, 5510, 5520, 5530, 5540, 5550, 5560, 5570, 5580, 5590, 5600, 5610, 5620, 5630, 5640, 5650, 5660, 5670, 5680, 5690, 5700, 5710, 5720, 5730, 5740, 5750, 5760, 5770, 5780, 5790, 5800, 5810, 5820, 5830, 5840, 5850, 5860, 5870, 5880, 5890, 5900, 5910, 5920, 5930, 5940, 5950, 5960, 5970, 5980, 5990, 6000, 6010, 6020, 6030, 6040, 6050, 6060, 6070, 6080, 6090, 6100, 6110, 6120, 6130, 6140, 6150, 6160, 6170, 6180, 6190, 6200, 6210, 6220, 6230, 6240, 6250, 6260, 6270, 6280, 6290, 6300, 6310, 6320, 6330, 6340, 6350, 6360, 6370, 6380, 6390, 6400, 6410, 6420, 6430, 6440, 6450, 6460, 6470, 6480, 6490, 6500, 6510, 6520, 6530, 6540, 6550, 6560, 6570, 6580, 6590, 6600, 6610, 6620, 6630, 6640, 6650, 6660, 6670, 6680, 6690, 6700, 6710, 6

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point down south on the river near Tuscarora where a levee has been constructed. (See map in figure 23, page 66.) Contained within the levee, which runs down to and along LaMarsh Creek (see map, page 83), are approximately four sections of land (about 2,500 acres) of which nearly half is zoned for light industrial use.

Continuing on south of this leveed area are about two and one-half sections along the river zoned for heavy industry. Some of this property adjacent to the highway and railroad is not subject to flooding. This entire river front property is fairly flat and from this standpoint, is well suited for most industrial purposes if flood protection is afforded.

Transportation: Water, rail, and highway transportation facilities are all available to this district. The Toledo, Peoria, and Western serves the entire stretch of river front. The Peoria Terminal and Chicago & Northwestern serves most of the district running along this western side of the river from Peoria down to a point opposite Pekin, where it crosses the river. The property just south of the city limits of Peoria is served by additional railroads coming in from the west at this point. The Minneapolis and St. Louis; the Chicago, Burlington, and Quincy; and the Peoria and Pekin Union Railway are such companies. Of considerable importance to this district is the fact that it lies within the Peoria-Pekin Switching District, affording substantial rate and service advantage.

Highway U. S. 24 has been widened to four lanes from Peoria south to a point opposite Pekin. This road borders the entire district under study, and will provide excellent highway service.

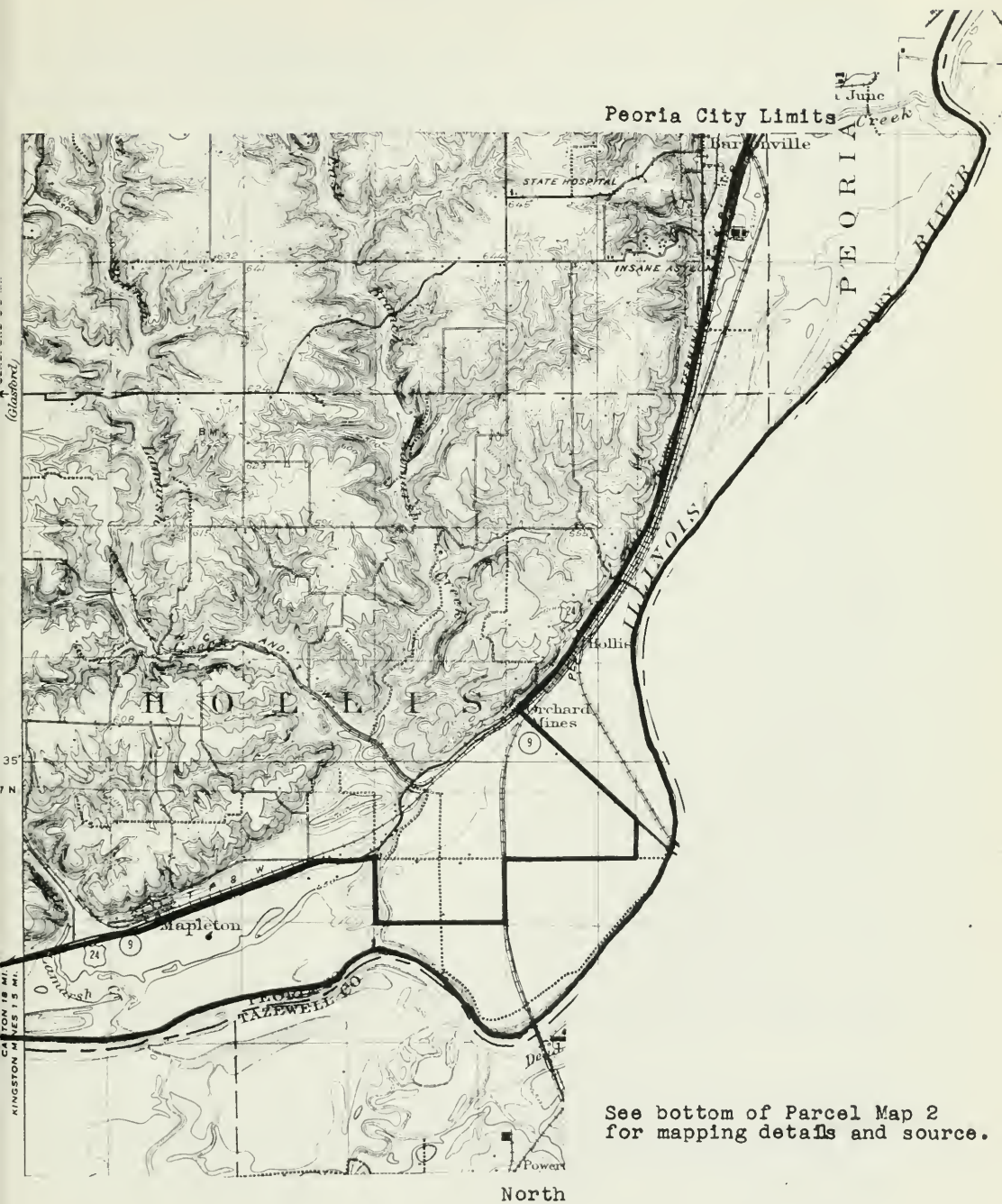
Water Supply and Waste Disposal: Further exploration is necessary before the potential groundwater supply can be fully appraised for this district. It is known that water is available here but the clay deposits go very deep in the area making well operations quite difficult. In the vicinity of Bartonville, water is now being pumped from wells located near the river shore line. It is felt that this condition of availability will probably extend on down south along the river. *

The Greater Peoria Sanitary District now has a main extending down through this area as far as Keystone Steel & Wire Company. The proximity of this service plus that of the river provides this area with a potential economic means of disposing of sanitary and industrial wastes.

Power and Gas: The availability of electric power and gas varies in this district. In the area between Peoria and Bartonville both gas and electric power is in the vicinity and would require but short extensions from the present service. The area immediately south of Bartonville is also near utility service. 14.4 K. V. are available and a gas transmission line which could be tapped runs through the property.

* Dr. Max Suter - Illinois State Water Survey.

6. BARTONVILLE DISTRICT PARCEL TOPOGRAPHIC DETAILS



See bottom of Parcel Map 2
for mapping details and source.

North

Below this area, i. e. from a point slightly north of Pekin on the west side of the river down to Kingston Mines, electric power is available from the 14.4 K. V. line that continues along the west side of the river to the south. Gas is available on the Tazewell County side of the river, and if sufficient demand were required this service could be made available from Pekin.

Fire Protection: This property runs through a variety of fire protection zones and thus, the degree of protection offered varies considerably. Between Bartonville and Peoria there are, at present, no hydrants; however, there is a main running between the two cities to which hydrants could be connected. The fire fighting equipment serving this same portion of the district is that of the Limestone Fire Protection District, stationed at Bellevue about three miles west of the property. South of Bartonville there are no fire protection mains or hydrants. The fire fighting equipment available is of the Timber-Hollis District within which the property lies. The equipment is stationed in Glasford which is about five miles below the southern boundary of this industrial property. (Kingston Mines)

Availability: All of the property south of Bartonville may be regarded as available. Details on the availability of property between Bartonville and Peoria are beyond the scope of this report, but may be obtained from the Association of Commerce.

7. Maxwell Station District -

Slightly over one section of land, approximately 700 acres, is zoned for light industry in this district. The topography is best suited for industries requiring entrance from the ground on various levels of the building. The east branch of the LaMarsh Creek originates here, shaping the land in contours.

Transportation: The district is served by the Minneapolis and St. Louis Railroad, and State Highway 116, both running in an east-west direction.

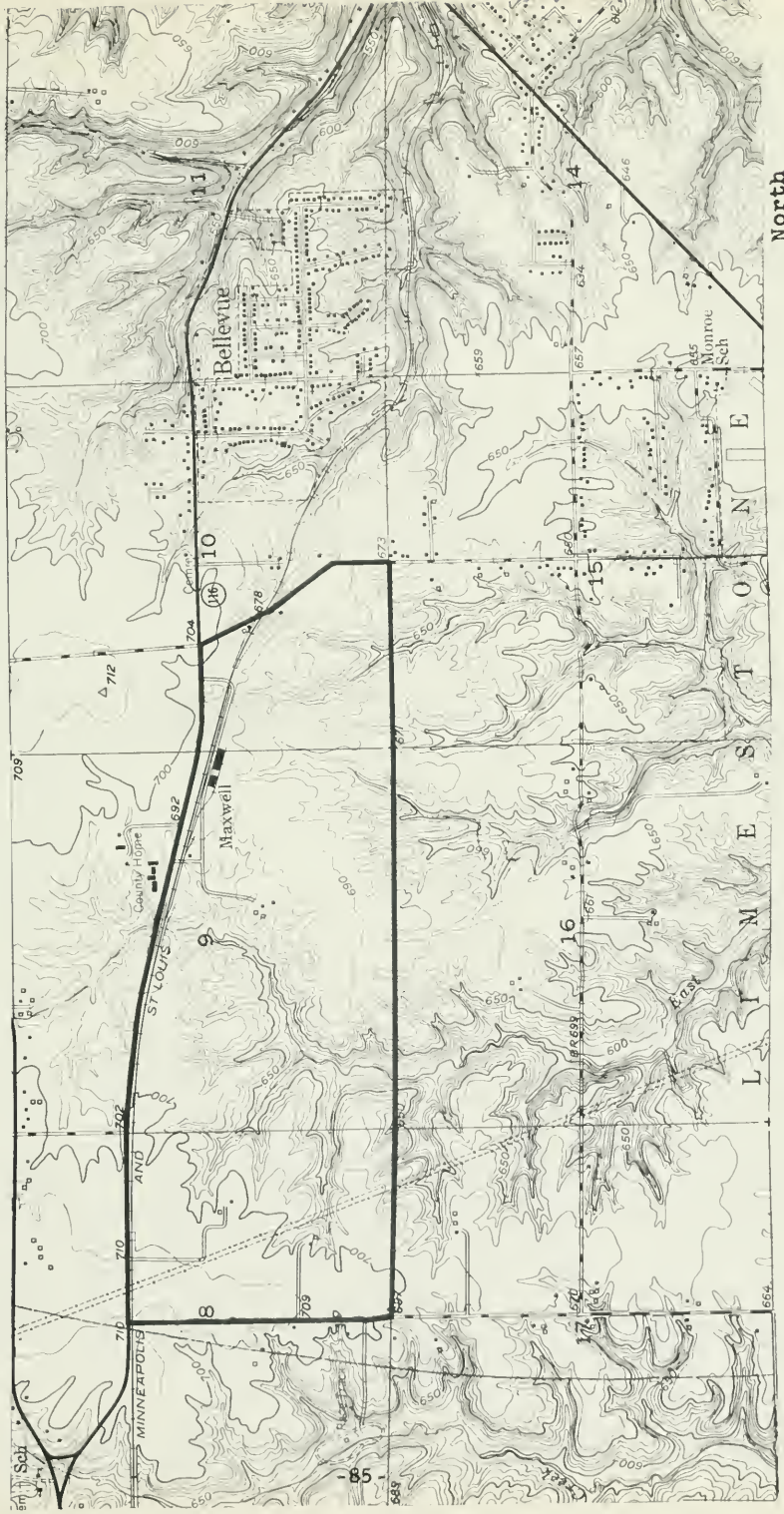
Water Supply and Waste Disposal: The ground water supply for this district would have to be located in the Kickapoo Creek Valley, approximately two miles east of the property. The supply at the creek valley location is regarded by the State Water Survey as being quite substantial.

The problem of disposal of waste from this site is somewhat simplified by the contour of the land and the presence of LaMarsh Creek; however, there are no municipal services of this type at this location.

Power and Gas: Both gas and electric power are available at this site. The power can be tapped from a 34 K. V. transmission line passing through the property which now feeds Hanna City.

Fire Protection: The Maxwell Station property lies in the Limestone Fire Protection District with equipment stationed in Bellevue, only about one mile away. There are no mains or hydrants located here at the present time; however, of all the Peoria County areas zoned for industrial use, this one has the closest fire fighting equipment.

7. MAXWELL STATION PARCEL
TOPOGRAPHIC DETAILS



See bottom of Parcel Maps 2 and 3 for source and mapping details.

Availability: All of this property may be currently regarded as available.

8. East Peoria District -

There are no zoning laws in Tazewell County. Therefore, the property which will be described in this report cannot be regarded as an exhaustive listing of all the potential industrial sites in the county. Rather, it is intended only to indicate here some of the larger, more readily available, or perhaps more desirable properties in Tazewell County.

TAZEWELL COUNTY

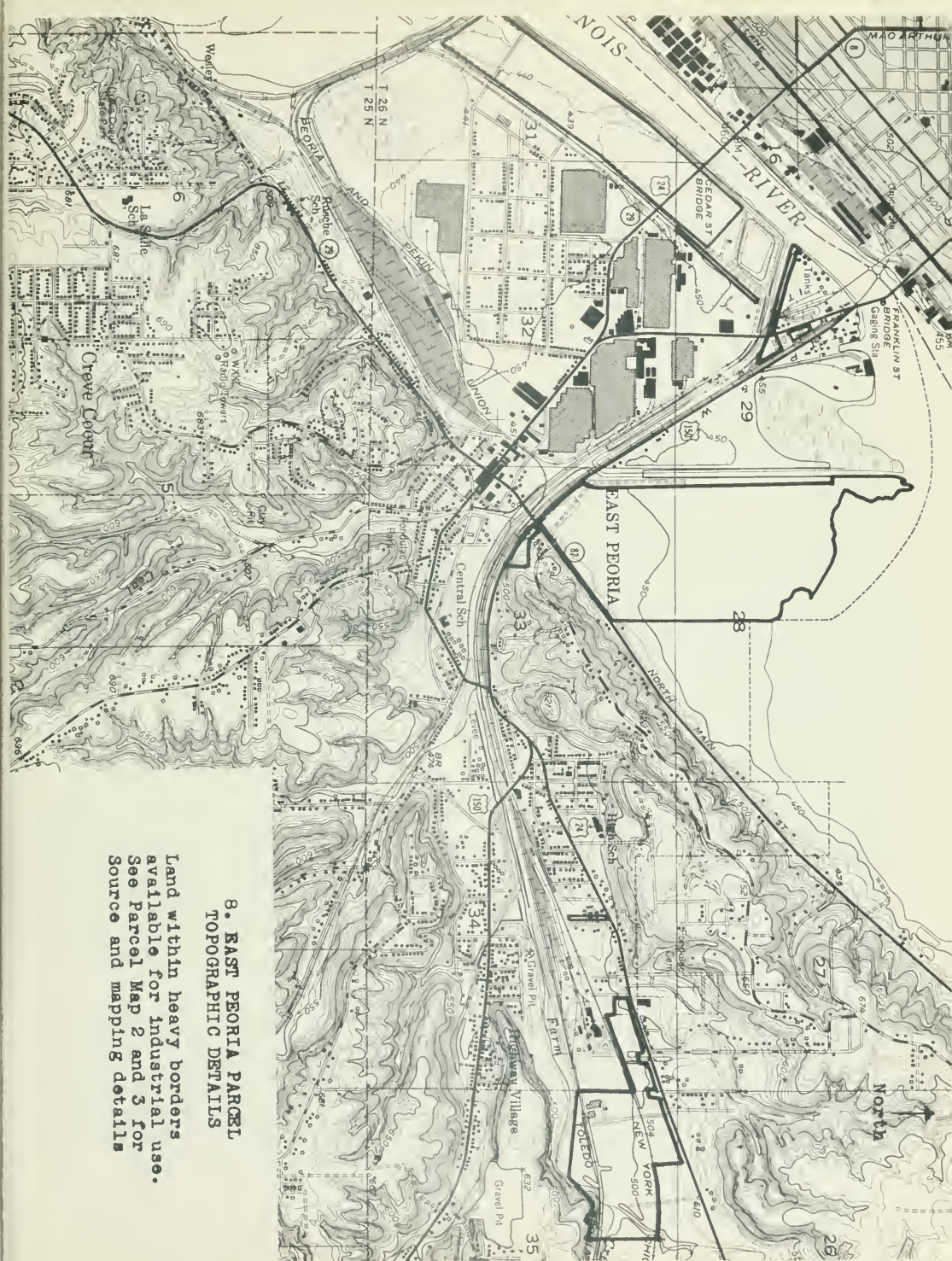
There are three separate plots available in or near East Peoria. Directly east of the corporate limits of the town are 70 acres of quite level ground lying across the Toledo, Peoria, and Western, and New York, Chicago, and St. Louis (Nickel Plate) Railroad right of ways. Within the corporate limits of East Peoria are two plots, one of 264 acres lying between the river and State Routes 116 and 150; and one of 125 acres lying on the river front just north of the P. & P. U. river bridge.

The 264 acre plot is on fairly flat ground, running from 440 to 456 feet elevation. The entire portion of the property is now subject to flood and would thus require levee construction before it could be used for most industrial purposes. The 125 acre plot is also very flat, varying in elevation only four feet. This property is protected from flooding by a levee that runs the entire length of the river frontage. The levee is constructed to provide a six foot clearance above the high water level. This clearance is three feet greater than is standard levee design practice in this area.

Transportation: The first plot described above (70 acres) just east of the T. P. & W. general offices is served by the T. P. & W., Pennsylvania, and Nickel Plate Railroads. This plot, as well as the other two in the East Peoria District, is in the Peoria-Pekin Switching District, a distinct advantage from the freight rate and service standpoint. The property is also served by U. S. Highway 24.

Adjacent to the 264 acre river-front plot run the tracks of the Illinois Terminal and the P. & P. U. in addition to those roads mentioned above serving the 70-acre plot. Thus, there are a total of five railroads running nearby.

U. S. Highway 24 serves as a boundary for one edge of the land, State Highway 116 provides another. Significant in the transportation service characteristics of this property is the fact that a bridge crossing the river into Peoria will pass over this land. The proposed bridge approach will begin at the intersections of U. S. 24 and Illinois 116, becoming elevated from that point. This construction will necessitate diverging the spillway channel along a path that will also cut across the property. The erection of the bridge will measureably reduce the utilization of the area for large industrial buildings, but certain transportation advantages should tend to provide compensation.



**8. EAST PEORIA PARCEL
TOPOGRAPHIC DETAILS**

Land within heavy borders
available for industrial use.
See Parcel Map 2 and 3 for
Source and mapping details

The 125-acre river front property is bounded by the T. P. & W. and the P. & P. U. At the present time there is no highway directly serving this land. State Route 29 passes over the land on an elevated bridge approach (Cedar Street Bridge). In order to provide for auto-truck transportation service to this property, some construction would be necessary.

Water Supply and Waste Disposal: All of the properties described lie within close reach of the East Peoria Sanitary System. A main now parallels U. S. 24 running up to the general offices of the T. P. & W. This could be used for service to the 70-acre plot. The two river front properties are within the city limits and thus have the municipal facilities available (see page 94 for brief description.)

Ground water is available at all of these plots; however, the potential supply is questionable. At the 70-acre plot, water is available, but the supply is limited and would be a factor requiring close study. The river front properties have water underneath them, but the presence of fine sand presents exploitation difficulties.

Power and Gas: Both fuel gas and electric power are readily available to this district. The power in all three cases is available at 14.4 K. V.

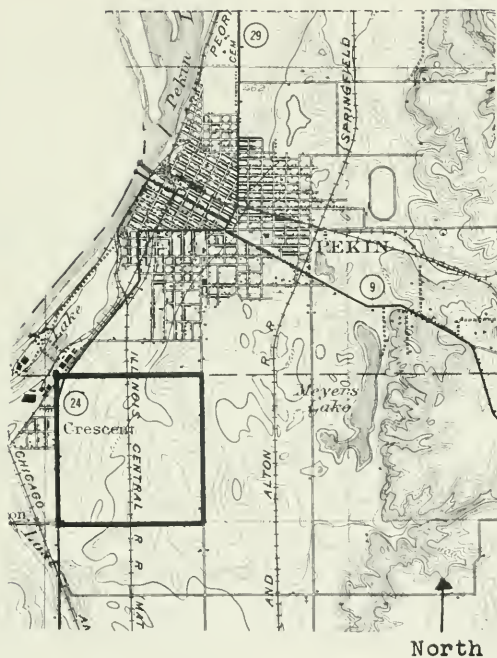
Fire Protection: The property within the corporate limits of East Peoria (the two river front sites) is protected by the East Peoria fire fighting department. Mains and hydrants are located throughout the city. The 70-acre plot lies in the North Tazewell Fire Protection District, which has its equipment stationed in Sunnyland subdivision, about two miles east on Route 24. There are no fire hydrants on or adjacent the property.

9. Pekin District -

There are a number of small parcels of land available in and around Pekin. However, the plot of greatest significance to this area is that lying adjacent Koch Street, the southern corporate limit of the city. Nearly a full section of land, bounded by State Route 29 on the west and an extension of Pekin's Fifth Street on the east is regarded as available. The topography of the land is ideal for most industrial purposes. The elevation at its center, near the Illinois Central Railroad, is 500 feet. The land slopes gradually down on either side, dropping about 30 feet in one-half mile.

Transportation: The Illinois Central line bisects the property. The southern yard limit of this line is below this land placing the property within the Peoria-Pekin Switching District. There is a well-developed highway network serving this parcel of land: State Highway 29 on the west, Pekin's Fifth Street (a township road) on the east, and Koch Street of Pekin on the north. Running within one-half mile or less from this property are the Gulf, Mobile, and Ohio; Chicago & North Western; and Chicago and Illinois Midland Railway right of ways.

9. PEKIN PARCEL
TOPOGRAPHIC DETAILS



Land in heavy border available
for industrial use.

See Parcel Map 2. for source and
mapping details

Water Supply and Waste Disposal: The water supply picture of the Pekin Area is one of the brightest in the State. The city is located over a ground water pool known to contain vast reserves (see Water Supply Section, page 190). Water would be available at this property either through connection with municipal facilities, or by providing for a private well.

The plot is also well suited from the sanitary waste disposal standpoint. A new municipal sewer main has been laid along Koch Street which borders the property. For details of Pekin's waste disposal facilities, see page 94.

Power and Gas: 14.4 K. V. electric power service is available at this property. Gas could readily be made available by tapping a transmission line which lies near the plot.

Fire Protection: At the present time, there is no fire fighting equipment obligated to serve this area within which the property lies. There are neither mains nor hydrants immediately adjacent the land.

10. South Pekin District -

Transportation: The South Pekin District is served by the Northwestern Railroad, a spur from State Route 29, and a bituminous township road out of Pekin. The Illinois Central right of way also runs not far from this property.

Water Supply and Waste Disposal: The water supply at South Pekin is quite adequate. The city is located in the region which includes Pekin and has an abundant pool of ground water. South Pekin has no sanitary sewerage system. Facilities of this type would have to be provided privately.

Power and Gas: 14.4 K. V. electric service is near the property; however, at present, there is no fuel gas available in the area.

Fire Protection: Within the corporate limits of the city, there are water mains and fire hydrants. South Pekin also has fire fighting equipment serving the area.

WASTE DISPOSAL

The local geographic features of any community generally dictate the type and cost of that community's waste disposal facilities. As has been mentioned before, the Illinois River has many purposes. One such purpose which concerns us here is that of waste disposal. The presence of the river enables the surrounding area to solve its waste disposal problems with a maximum of sanitation and a minimum of cost.

There are now in existence four distinct waste disposal systems in the Peoria-Tazewell County Area. The largest is that of the Greater Peoria Sanitary District, which is described in the following article.

THE GREATER PEORIA SANITARY DISTRICT INDUSTRIAL WASTE TREATMENT (15*)

The Sanitary District treatment facilities were placed in operation in May, 1931. The collecting system of intercepting sewers terminates at the treatment works in an 84-inch diameter sewer with a maximum capacity of ninety-million gallons per day (MGD). The treatment works was designed with a capacity for treating domestic and industrial wastes equivalent to a population of 200,000. Improvements in process and equipment have increased this capacity to over 300,000 population equivalent. The average population equivalent treated in 1953 was 291,000.

In the early days of the Sanitary District operations, industrial wastes of an organic nature constituted a major problem in the Peoria area. Wastes from the distilleries and other industries were equivalent to a population of over 2,000,000. However, with the excellent cooperation of industry these wastes have been processed and treated for the most part at the industrial plant with a removal of over 95 per cent of this organic load.

Industrial Wastes

Most industries do not produce objectionable industrial wastes. The Sanitary District has ordinances regulating the discharge of objectionable substances such as gasoline, oils, and greases, large quantities of acids and alkalis, and such substances which, in considerable quantity, would interfere with biological sewage treatment works processes.

In most cases industries producing such wastes provide control facilities in their plants so that no harm will come to sewers or to the treatment works. At no time in its history has it been necessary for the Sanitary District to order an industry to stop the discharge of such wastes.

Since the treatment works facilities have limited capacity, the quantity of industrial wastes discharged to the sewers must be regulated. The present attitude toward large producers of industrial wastes is to permit its discharge into the

* See Bibliography

sewer system, providing an economic means of recovering the waste materials within the industry does not exist. For example, such wastes as brewery wastes cannot be recovered economically, and these are discharged into the sewer system and treated at the treatment works. Distillery wastes, however, can be made into cattle feed and sold at a considerable profit. Therefore, the producers of such wastes normally provide the necessary processing equipment to prevent their discharge to the sewers or to the Illinois River prior to recovery.

Each industrial waste is a distinct problem requiring special consideration. The Sanitary District assist industry in determining the character and acceptability of the waste and in some cases special studies are made to determine the most effective manner of treatment. These services are provided without cost to the industry.

Sewer Facilities

Sewers are available in most of the area within the District boundaries; however, certain industrial zones are not yet provided with immediate sewer outlet facilities. The District has cooperated with industry in such areas to work out the means of affording proper sewer service. Again each problem is distinct and should be discussed with the District Engineers. The map of the Sanitary District in figure 24, page 93, shows the zones that are now served with sewers. Areas outside and contiguous with the District boundaries can be annexed to the District and thereby obtain sewer outlet facilities. Many such areas, if annexed, would not have an immediate outlet for their wastes, and arrangements with the District would have to be worked out in order to provide the required facilities.

Treatment Works

The treatment works is of the activated sludge-separate sludge digestion type, and is capable of removing about 90 per cent of the total organic matter and over 99 per cent of the bacteria originally present in the sewage. The solids removed from the sewage are stabilized by the methane fermentation process with the formation of a gas similar to natural gas. The gas is used in gas engines for the production of power to operate the treatment plant. The stabilized solids are dried and used as fertilizer, most of the product being used by farmers and truck gardeners within a twenty-mile radius of Peoria. A considerable amount is also taken by the Peoria-Park District.

The Normal Sanitary District Tax Rate and the Industrial Waste Service Charge

The corporate tax rate of the Sanitary District for 1953 was \$0.0435 per \$100 of assessed valuation. A house assessed at \$5000 would pay \$2.18 per year for District operation. Even at this, in many industrial cases, the normal taxes pay the cost of waste treatment; however, in those industries that produce waste of high organic content, this is not the case. Such industries are required to pay a service charge proportional to the organic material in the waste discharged to the sewers.

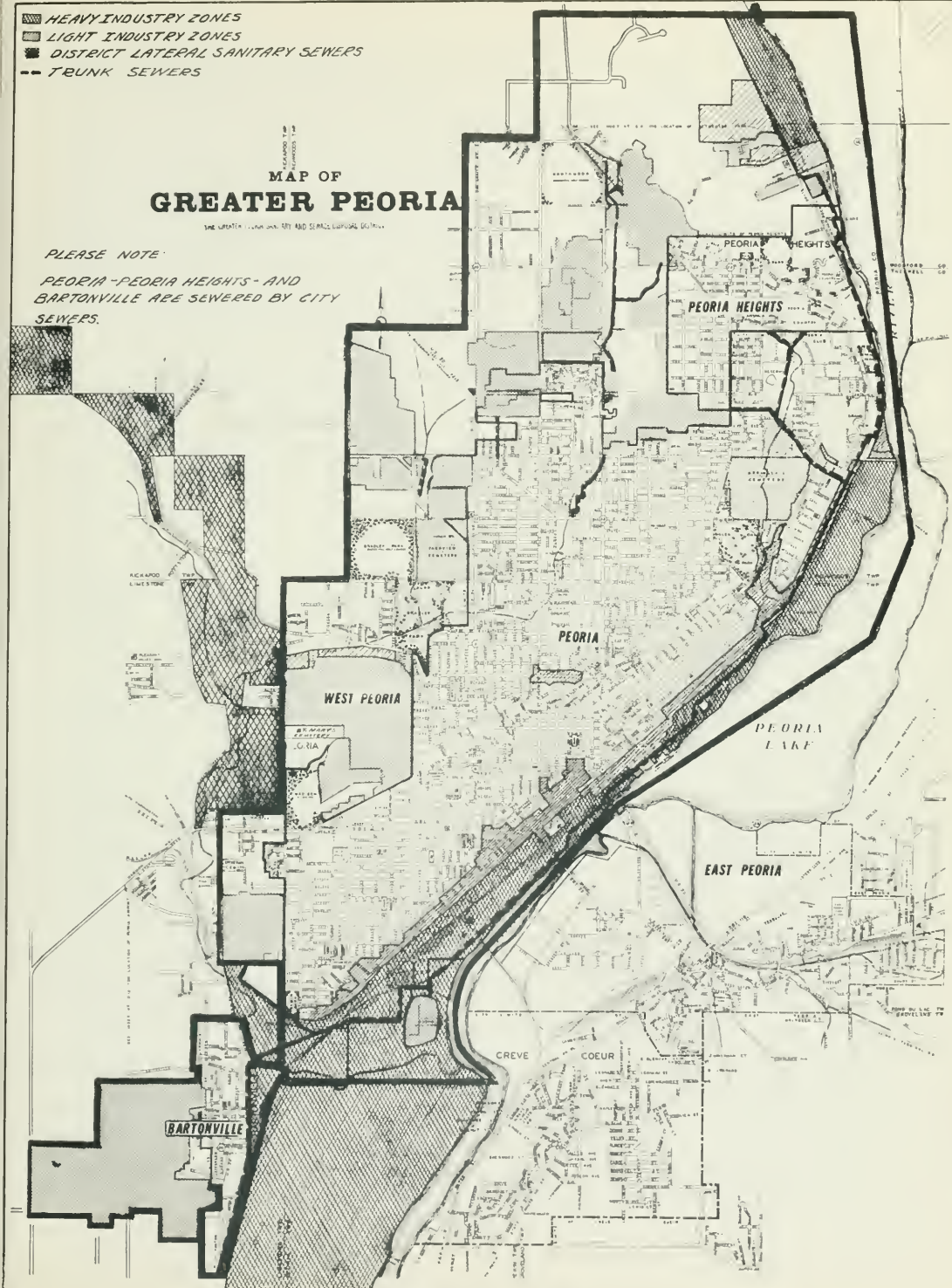
- HEAVY INDUSTRY ZONES
- LIGHT INDUSTRY ZONES
- DISTRICT LATERAL SANITARY SEWERS
- TRUNK SEWERS

MAP OF GREATER PEORIA

THE LATEST PLAN FOR CITY AND SEWER DEPARTMENT

PLEASE NOTE:

PEORIA-PEORIA HEIGHTS- AND
BARTONVILLE ARE SEWERED BY CITY
SEWERS.



An industry producing waste equivalent to a city of 10,000 population pays a service charge of approximately \$600 per month. This is an amount considerably less than it would cost the industry to treat the waste in its own plant.

Example

An industry wishing to locate in the Peoria area contacts the Sanitary District regarding the nature of its waste in both concentration of organic matter and quantity. If these values are not known, a study is made in a similar plant to determine them. The industry is then advised regarding the acceptability of the waste for discharge into the sewer system. In the event that sewers are not available to the chosen site, means are studied to provide the required sewers.

In the event that the waste is of very large population equivalent, more than can be handled at the existing treatment works, the problem is then resolved by both industry and District officials cooperating together. Agreements are entered into so that the proper facilities are provided. In short, each industrial waste problem is studied so that an adequate means of its treatment may be afforded.

The cities of Pekin and East Peoria have plants similar to each other, comprised in each case of a primary sedimentation and separate sludge digester process. These systems remove from 35 to 50 per cent of the organic matter of the sewage, and pump the effluent into the Illinois River.

Washington, Illinois, is the only other city in the Peoria-Tazewell County area that currently has a waste disposal system, although the town of Morton is scheduled to construct such a facility next year. Washington's location requires a waste disposal system somewhat more elaborate than that of East Peoria or Pekin. Whereas the latter cities only have a primary separation operation, Washington has both a primary and a secondary step in its processing, and in this way is similar to the process used by the Greater Peoria Sanitary District. The detailed operations, however, differ from Peoria's. In the process at Washington, the first step is a grit removal operation. (In this city, as in all others in these two counties, combined sewers are used, i.e. both sanitary and storm sewers ultimately connect to the waste disposal plant.) Following the grit removal operation is one of primary sedimentation. This, in turn, is followed by a secondary sedimentation step with a separate sludge digestion process. Thus the Washington plant removes from 85 to 95 per cent of the organic matter present in the sewerage prior to pumping the effluent into Peoria Creek.

The Tazewell County waste disposal plants have a policy similar to that of the Peoria system in regard to new industry. The solution to problems posed by an industry with a waste disposal of high organic content are arrived at on an individual basis after a joint study by the City Engineer and company representatives. These solutions will probably follow a fairly standard pattern, and although local conditions may vary somewhat between cities, all of these systems are currently

served by the same engineer, Mr. Jack Crenshaw, City Engineer for East Peoria, Pekin, Washington, and Morton.

There are state laws regulating the condition of sewerage effluent pumped into all streams. The conditions under which a company may operate on an individual basis in disposing of its waste in this fashion is not precisely spelled out by law, but here again the interpretation and suggestion for an economic solution are available through consultation with the sanitary districts or waste disposal systems serving the area in question. There are obvious advantages to industrial producers of large volumes of waste to locate on streams such as the Illinois as evidenced by the fact that local plants such as paper processors, distillers, and food processors all pump their effluent into the River. It must be emphasized, however, that in all cases similar to the above, either because of an innocuous waste to begin with, or because of an adequate waste treatment that the effluent delivered to the River must be in as good or better condition than that produced by the local waste disposal plant.

SURPLUS CAPACITY OF EXISTING TREATMENT FACILITIES

All of the waste disposal systems discussed, with the possible exception of East Peoria, have currently some excess capacity.

Peoria and Pekin both have approximately 10,000 population equivalent surplus, and Washington, about 4000. This surplus is sufficient to support some industrial development in any of the above locations. Most types of manufacturing plants could be provided for without creating any problem. Many large processing plants would find it economical to treat their own waste. Most industries other than those processing foods and related products, or chemical products, would not present a problem to begin with.

The limiting factor for development within areas served by the systems currently appears not to be that of transporting the sewerage to the plant but that of the actual treatment facilities. Therefore, the present status of the waste disposal systems in the area seems to mitigate only against future development of rather specialized industrial processes such as breweries or other similar industries which have a high organic waste and do not find it economical to recover any of the organic material at the plant.

The amount of industrial development in terms of the number of new industrial plants that could be attracted to the area, however, will obviously be limited as the present treatment surplus is certainly not substantial in any of the systems. An additional restricting factor superimposed on that mentioned above is the extensiveness of area covered by the systems. A glance at the land available for industrial sites in Peoria County, for instance, shows that a substantial proportion (approximately 70%) is not readily accessible to the present sewer system.

This fact is, of course, not a deterrent to all industries, but it certainly tends to minimize the type of industrial operations that can be supported and in general does not present an attractive prospect to any industry. This question will be more specifically treated under the section on Industrial Sites.

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CHAPTER III

POPULATION



PEORIA* POPULATION INCREASE COMPARED TO THE STATE OF ILLINOIS
AND THE UNITED STATES POPULATION INCREASE**

Except for the early period of 1840 to 1850, Peoria's population increase*** was substantially less than that of Illinois until 1920. However, from 1920 through 1950, Peoria has been increasing at a more rapid rate than Illinois' population. Of particular interest is the increase from 1930 to 1940, the depression years. Peoria was far ahead of Illinois during this period, indicating that the depression had much less effect on Peoria than on the State in general.

The comparison of Peoria's population increase to that of the United States is not as clear. It has been above and below several times, and at no time long enough to establish a trend.

Again, perhaps the most significant period is from 1930 to 1940, when Peoria was increasing at a more rapid rate than the United States as a whole. This would seem to indicate that Peoria is more "depression-proof" than the average United States city.

* Wherever the word "Peoria" is used in this chapter, it refers to the "PEORIA STANDARD METROPOLITAN AREA."

** See Appendix I A 3-1

*** All population increases pertain to per cent increase.

POPULATION

	PEORIA STANDARD METROPOLITAN AREA '	<u>ILLINOIS</u>	<u>UNITED STATES</u>
1810		12, 282	7, 239, 881
1820		55, 211	9, 638, 453
1830	6, 026	157, 445	12, 866, 020
1840	13, 374	476, 183	17, 069, 453
1850	29, 599	851, 470	23, 191, 876
1860	58, 071	1, 711, 951	31, 443, 321
1870	75, 443	2, 539, 891	38, 558, 371
1880	85, 021	3, 077, 871	50, 155, 783
1890	99, 934	3, 826, 352	62, 947, 714
1900	121, 736	4, 821, 550	75, 994, 575
1910	134, 282	5, 638, 591	91, 972, 266
1920	150, 250	6, 485, 280	105, 710, 620
1930	187, 426	7, 630, 654	122, 775, 046
1940	211, 736	7, 897, 241	131, 669, 275
1950	250, 512	8, 712, 176	150, 697, 361

Source: All data in Chapter III Tables are from Illinois-General Characteristics and special Population Reports, 1950 United States Census of Population, United States Department of Commerce Bureau of the Census.

Table 1

COMPARISON OF PEORIA POPULATION CHARACTERISTICS
WITH OTHER REPRESENTATIVE AREAS *

Peoria has appreciably less non-whites than the average for all the areas and a great deal less than the average for the State. Interestingly, although not shown in these figures, Tazewell County has only 76 non-whites.

Peoria County has by far the largest area of the cities listed and this influences the per cent of rural population, as the Peoria Standard Metropolitan Area takes in a great deal more farm land than any of the other area. Because of this, the population per square mile is much lower for Peoria than it is for the other areas compared. However, when the city figures are used, Peoria has a larger population per square mile than any of the other cities shown.

Percentage-wise, Peoria has less of an urban population, and more of a rural population than the other areas. However, as noted above, this is due to the large amount of farm land included in the area.

Peoria is above average in median school years completed when compared to the State of Illinois, but lower than the other cities with which it is compared, with the exception of Evansville.

Peoria is also lower in per cent of population completing high school or higher, than the state or the other cities with which it is compared with the exceptions of Evansville and Rockford. However, it should be noted that the totals on this statistic show that Peoria has more people completing high school or beyond than any of the other cities except Des Moines.

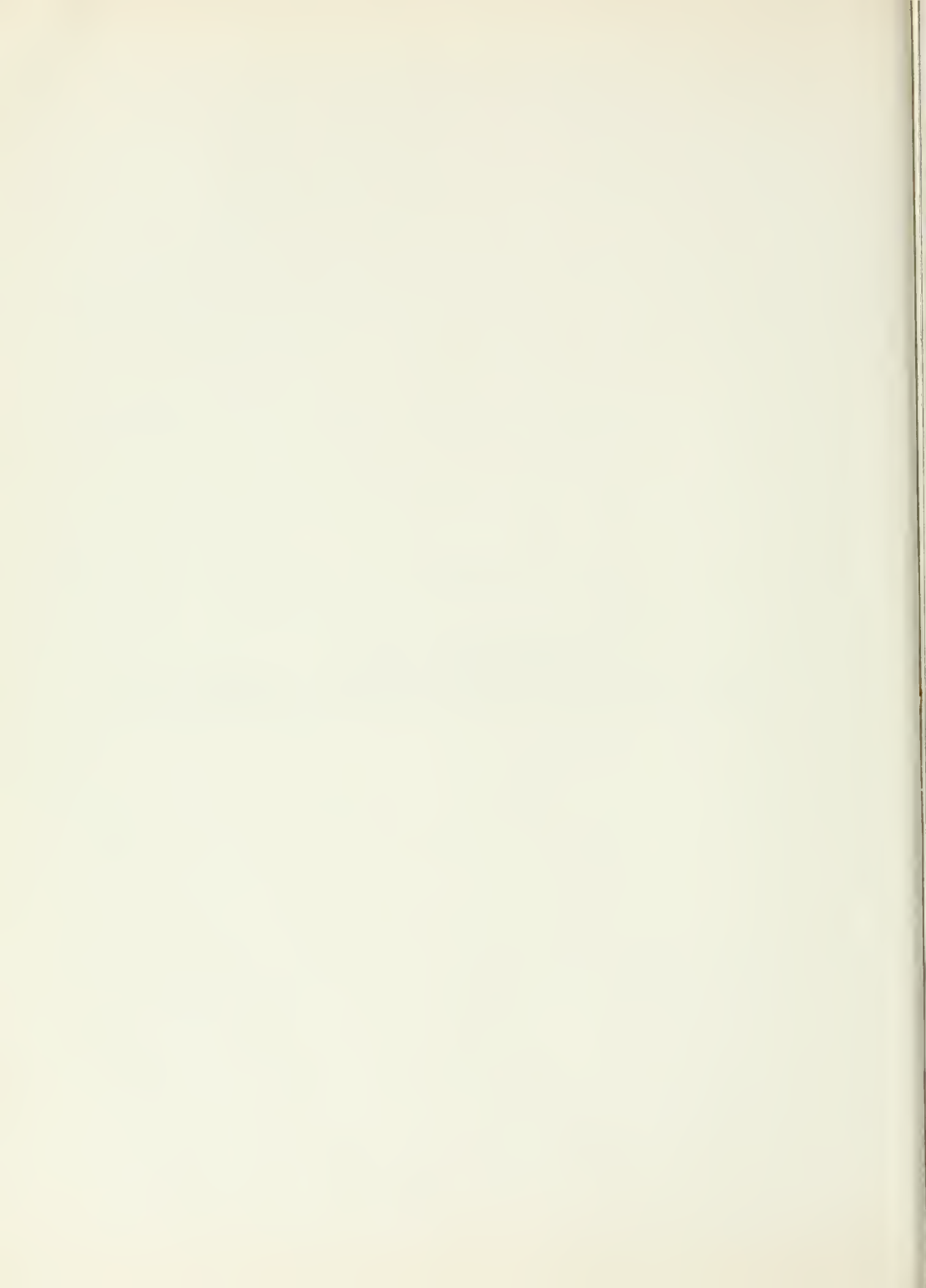
* See Appendix A 3-2



CHAPTER IV

MARKET FOR

LOCALLY MANUFACTURED PRODUCTS



MARKETS FOR LOCALLY MANUFACTURED PRODUCTS

All commercially manufactured products may be grouped into two broad classifications: consumer goods and producer goods.

Consumer Goods: The market for any specific manufactured product is normally thought of as having four distinct levels, based on the size of the geographic area involved in each case. These are termed: international, national, regional, and local.

National Market: Peoria's geographic location is ideal for serving the national consumer market. The city itself is about 160 air miles northwest of the center of United States population. This centralized location, coupled with extensive transportation facilities serving this area (see section 9, page 246) provide unique advantages for producers of nationally marketed products.

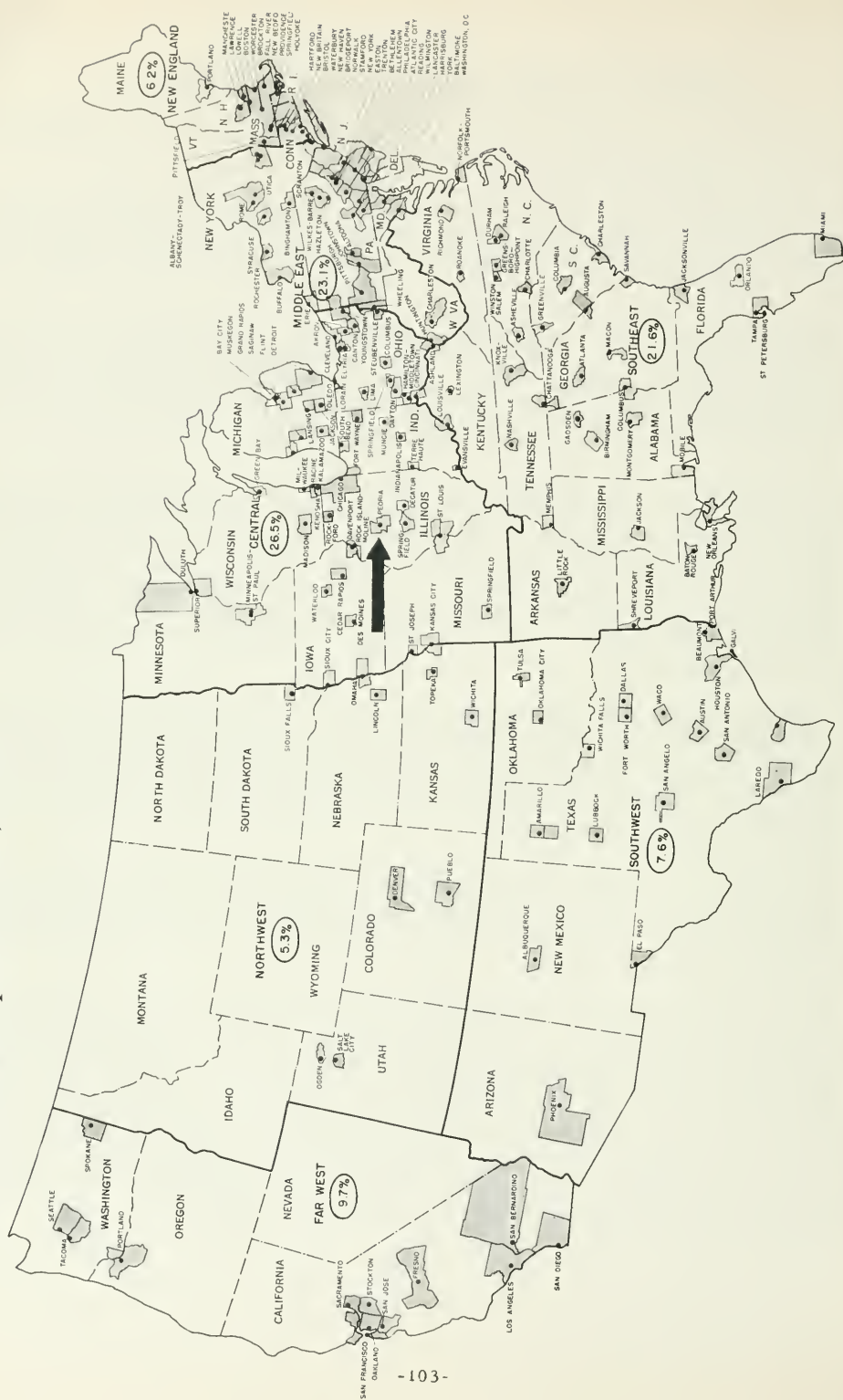
As is noted above, the consumer markets in the United States are its more than 150 million people living in nearly 17,000 cities and villages and on 5,800,000 farms and in unincorporated areas. However, more than half of the people in this country live in 168 metropolitan areas. In the case of many nationally distributed products, the major portion of the supply is disposed of through these metropolitan areas which are also usually marketing centers. Thus, reference to Peoria's location relative to these concentrated markets is of some importance. (See map, page 103)

Regional Market: Regional markets vary in size, again depending on the manufacturing-distribution cost relationships, among other things. One regional area that the U. S. Department of Commerce uses in dealing with the marketing characteristics of this locality is termed the Central Section of the United States. The table on page 104 demonstrates the market potential offered by this region of the country. (Table 1)

As is seen from table 1 on page 104, there is a high concentration of both buyers and buying power in this section. More than one-fourth of the United States population is located here, and the section accounts for almost one-third of the country's retail and wholesale trade.

Treating regional markets of diminishing size, it is of importance to note some of the characteristics of the area including just those states that are contiguous to Illinois. (See table 2 on pages 105 and 106 for listing.) In relating the population characteristics to marketing practices in the area it is observed that approximately 50% of the people living in this six-state area are concentrated in 27 urbanized areas. Over 58% of the retail trade and 82% of the wholesale trade of the entire region is carried out in these metropolitan areas. The concentration of buying activity in this region makes marketing of both consumer and industrial products much simpler for industries located in this locale.

168 Standard Metropolitan Areas, 1950



MARKETING CHARACTERISTICS OF THE CENTRAL STATES

State	<u>Indiana</u>	<u>Illinois</u>	<u>Iowa</u>	<u>Michigan</u>
1950 Population	3,934,224	8,712,176	2,621,073	6,371,766
Median Family Income in Dollars	3197	3627	3068	3519
Per Cent of Families Having Income \$2000 or less	24.7	19.0	27.0	19.4
Per Cent of Families Having Income \$5000 or more	19.5	28.1	18.4	25.4
Total Employed in Millions	1.518	3.546	1.002	2.393
Retail Trade Sales in Billions of Dollars	3.532	8.805	2.556	5.950
Wholesale Trade Sales in Billions of Dollars	3.227	18.136	3.361	6.683

State	<u>Minnesota</u>	<u>Missouri</u>	<u>Ohio</u>	<u>Wisconsin</u>
1950 Population	2,982,483	3,954,653	7,946,627	3,434,575
Median Family Income in Dollars	3163	2617	3363	3256
Per Cent of Families Having Income \$2000 or less	25.5	37.2	21.2	24.0
Per Cent of Families Having Income \$5000 or more	19.4	15.4	22.4	20.3
Total Employed in Millions	1.144	1.521	3.059	1.355
Retail Trade Sales in Billions of Dollars	2.906	3.568	7.373	3.240
Wholesale Trade Sales in Billions of Dollars	5.026	7.421	9.469	2.829

	<u>Total</u>	<u>U. S.</u>	<u>Regional % of U. S.</u>
1950 Population	39,957,577	150,697,361	26.5
Median Family Income in Dollars		3073	
Per Cent of Families Having Income \$2000 or less		29.2	
Per Cent of Families Having Income \$5000 or more		20.1	
Total Employed in Millions	15.538	56.24	27.7
Retail Trade Sales in Billions of Dollars	37.930	130.5	29.0
Wholesale Trade Sales in Billions of Dollars	56.152	188.7	29.8

Source: City & County Data Book, U. S. Department of Commerce, 1952.

Table 1

MARKETS PROVIDED BY THE STANDARD METROPOLITAN AREAS
IN CONTIGUOUS STATES

	<u>Population</u>	<u>Median Family Income</u>	<u>Employed 1,000,000</u>	<u>Retail Trade \$ Billion</u>	<u>Wholesale Trade \$ Billion</u>
ILLINOIS					
Chicago	5,495,364	\$4,063	2,362,551	5,989,723	15,080,108
Decatur	98,853	3,375	38,874	105,627	160,478
Peoria	250,512	3,568	100,681	242,133	398,022
Rockford	152,385	3,766	66,254	163,760	135,639
Rock Island- Moline	234,256	3,677	95,245	246,739	288,953
Springfield	131,484	3,298	52,966	143,875	183,768
Total	6,362,854		2,716,571	6,891,857	16,246,968
MISSOURI					
St. Louis	1,681,281	3,383	676,917	1,567,167	3,990,234
Kansas City	814,357	3,398	339,811	990,626	3,252,867
St. Joseph	96,826	2,921	37,101	89,798	365,060
Springfield	104,823	2,574	38,913	99,815	154,418
IOWA					
Cedar Rapids	104,274	3,433	44,514	118,353	142,522
Des Moines	226,010	3,651	94,899	267,871	582,292
Sioux City	103,917	3,377	42,088	125,931	746,508
Waterloo	100,488	3,714	42,128	107,631	73,698
WISCONSIN					
Green Bay	98,314	3,441	36,767	97,582	167,135
Madison	169,357	3,647	70,169	172,953	149,648
Milwaukee	871,047	3,926	374,755	926,279	1,504,152
Kenosha	75,238	3,626	31,859	73,587	28,260
Racine	109,585	3,930	45,180	114,884	59,991
INDIANA					
South Bend	205,058	4,150	86,280	217,908	166,069
Ft. Wayne	183,722	3,653	75,481	193,390	188,821
Muncie	90,252	3,301	35,147	77,319	41,567
Indianapolis	551,777	3,636	233,959	627,565	1,481,025
Terre Haute	105,160	3,048	39,834	104,944	93,554
Evansville	160,422	3,249	62,782	149,941	199,297
KENTUCKY					
Louisville	576,900	3,205	224,444	517,109	975,668
Lexington	100,746	2,733	37,685	107,542	162,482

Table 2

(continued)

	<u>Population</u>	<u>Median Family Income</u>	<u>Employed 1,000,000</u>	<u>Retail Trade \$ Billion</u>	<u>Wholesale Trade \$ Billion</u>
TOTAL					
Ill., Mo., Iowa, Wisc., Ind., Kty.	12,892,368		5,387,284	13,640,052	30,772,236
Per cent of U. S. accounted for by above States	50.5%		54.7%	58.3%	82.0%

Source: Census of Business, Volume III, 1950, U. S. Department of Commerce.
Table 2

As has been pointed out, Peoria lies almost equidistant from both St. Louis and Chicago. If the regional market is defined to include only the relatively small geographic area within the State of Illinois plus St. Louis, the population total for the metropolitan areas in this smaller state-region is in excess of eight million * and the number of wage earners is almost three and one-half million.

Sales in these urbanized areas of the state totaled almost eight and one-half billion dollars in retail trade and over twenty billion dollars in wholesale trade in 1950. The significance of these last figures which include only the six standard metropolitan areas ** in Illinois plus St. Louis, is perhaps best demonstrated by the fact that they account for 5% of the U. S. population, over 6% of the U. S. wage earners, 6 1/2% of the national trade (retail) and almost 11% of the national wholesale trade.

Local Market: Studies made by the U. S. Department of Commerce have established Peoria as one of the sixty-three major trading centers in the country and one of the three in the State of Illinois. The boundary of the geographic area which Peoria serves has been arrived at by observing the buying habits of the population, characteristics of transportation, location of competing urban areas (for trade), newspaper circulation, etc. The Peoria trading area included a population of 581,567 in 1950, see appendix, page 547, for list of counties. Total retail sales in the area based on Retailer's Occupation Tax Returns, were in excess of 755 million dollars in 1953. Sales Management's estimate of the consumer "Net Effective Buying Power" *** in these counties in 1953 was 969 million dollars. (For buying power by county, see appendix, page 547.)

There is a rather substantial difference here between "effective income" and retail sales, indicating perhaps either a general reluctance to purchase during this year, or sales techniques that were not sufficiently aggressive or considerable purchases made outside the trading area. However a study of the change in savings deposits in metropolitan Peoria banks and savings and loan associations (see table 3, page 108) seems to indicate that the disparity between income and spending is most likely caused by the first two conditions.

The startling increase in these deposits, to say the least, indicates the presence of a substantial local market potential.

In appraising the characteristics of the local market, it is important to know the relative standing of Peoria with respect to other mid-west cities of similar size. Some economic bench-marks for these cities are presented in table 4 on page 109. It should be emphasized that these are only estimates; however, the information is probably valid for comparative purposes. Of the five standard metropolitan areas included here, Peoria has the largest population and therefore the largest Net Effective Buying Income. Note that this value is different than the figure presented in the discussion of the local Peoria area market as the Standard Metropolitan

* ** Based on population rather than industrial employment.

*** Sales Management's 1954 Survey of Buying Power. Net Effective Buying Power is that portion of the consumer's income remaining after income taxes.

SAVINGS DEPOSITS

In Metropolitan Peoria's Banks and Savings and Loan Associations *

	<u>As of</u> <u>12/31/51</u>	<u>As of</u> <u>12/31/52</u>	<u>As of</u> <u>12/31/53</u>
Savings in Banks	\$ 52,461,219	\$ 60,730,545	\$ 63,405,593
Savings in Savings & Loan Assn's.	64,706,193	78,240,133	91,910,000
Total Savings Deposits	117,167,412	138,970,678	155,315,693
Total Savings Deposits . . . 1953	\$ 155,315,693		
. . . 1951	<u>117,167,412</u>		
Two Year Increase	\$ 38,148,281		
% of Increase	32.6%		

Source: Peoria Journal Star, March 31, 1954.

* 9 Banks, 12 Savings and Loan Associations in Peoria, East Peoria, Bartonville and Pekin.

Table 3

Population Estimates*
1000's (1/1/54)

1953 Estimates*
Effective Buying Income**

	<u>Population</u>	<u>Families</u>	<u>Urbanized Population</u>	<u>Net \$1000</u>	<u>Per Capita</u>	<u>Per Family</u>
Quad Cities	246.8	76.9	207.3	443,975	\$1,799	\$5,773
Des Moines	236.1	77.5	212.3	445,915	1,889	5,754
Evansville	175.3	55.3	152.9	292,948	1,671	5,297
Peoria	265.8	83.4	201.4	480,794	1,809	5,765
Rockford	164.6	52.7	137.6	300,078	1,823	5,694

1953 Retail Sales Estimates*

5 Store Groups Sales in \$1000

	<u>\$1000</u>	<u>% of Buying Power</u>	<u>Area Sales Per Family</u>	<u>General Merchandise</u>	<u>Furniture Household</u>	<u>Auto</u>	<u>Drug</u>
Quad Cities	316,386	71.5	4,114	39,804	14,536	69,219	8,970
Des Moines	341,880	77.0	4,411	47,483	18,513	83,611	10,084
Evansville	202,575	69.5	3,663	23,436	12,852	39,424	7,083
Peoria	300,046	62.5	3,598	40,125	17,123	59,272	7,199
Rockford	233,928	78.5	4,439	24,528	14,541	43,296	6,104

* These estimates are taken from the 1954 Survey of Buying Power, by Sales Management, Inc.
** Net Effective Buying Income - Amount of consumer's income after income taxes.

Area includes only the counties of Peoria and Tazewell, while the Peoria area includes ten additional counties. In terms of unit buying income, Peoria ranks second in both Net Effective Income per capita and per family. It is important to note that although Peoria has the highest estimated buying income it ranks third in retail sales. A comparison of the relationship between retail sales and buying power shows Peoria with the lowest percentage of the five cities. There are many conditions which could contribute to this situation, but these figures do tend to corroborate the earlier discussion of this matter in connection with the entire Peoria area. It is a situation that certainly appears to warrant further exploration.

Although Net Effective Buying Income per capita and per family are important measures of market potentials, they are not in themselves completely descriptive. It is valuable to supplement this information with a more detailed study of the distribution of the income. This distribution provides a more meaningful index of the consumers' propensity to purchase certain types of commodities perhaps not regarded as basic to their existence. In other words, the distribution of income is significant in establishing the pattern of commodity purchases in any given community.

Table 5, page 111, gives some indication of this condition in Peoria and its relative standing with the national average. These county data are based on the source of income rather than the residence of the earner. The Tazewell County data, for example, indicates the distribution income earned in that county, not the distribution of income of Tazewell County residents. This county which, with Peoria County, constitutes the Peoria Standard Metropolitan Area, shows a relatively high median income. The lowest income group is little more than half the national average and has the least proportionate number of people of the five cities studied. On the other hand, Tazewell County has the highest proportion of wage earners in the \$4000 to \$6999 income bracket of all five cities and is more than 50% higher than the average on the relative size of the earners in this bracket.

The distribution of income in Peoria County is most notable for the high proportion of earnings of the group in the highest income bracket.

By and large Peoria is in an enviable position from the consumer market standpoint. The city is in the heart of a prosperous, densely populated manufacturing and agricultural area, providing an attractive regional market for commodities produced locally.

The city is close to the center of U.S. population, and has a well-developed complex of railroad, highway, water, and air transportation facilities, characteristics enhancing the economics of nationally marketing locally produced commodities.

The City of Peoria, being a center of one of the three major trading areas in Illinois, serves an extensive, well-populated local market, one which has made notable strides in accumulating wealth within the last few years; and, therefore, one which offers a vast potential for locally produced items, whose nature dictates that they be locally marketed.

Income Breakdown of Consumer Spending Units
Net Income 1953

	Total Consumer Units 1000	\$0-2499		\$2500-3999		\$4000-6999		\$7000 & over	
		% Units	% \$	% Units	% \$	% Units	% \$	% Units	% \$
Total United States	55,059.3	30.3	9.1	26.0	19.2	30.7	35.4	13.0	36.3
Peoria County	66.6	22.2	5.8	24.7	16.1	37.9	38.3	15.2	39.8
Tazewell County	27.3	16.4	4.2	22.8	14.6	46.0	45.5	14.8	35.7
Polk County, Iowa (Des Moines)	90.1	22.2	6.0	25.3	16.9	36.8	38.2	15.7	38.9
Vanderburg County, Indiana (Evansville)	62.1	24.7	7.0	26.9	18.9	36.1	39.3	12.3	34.8
Winnebago County, Illinois (Rockford)	58.2	18.2	4.7	21.6	13.9	43.5	43.3	16.7	38.1
Rock Island County, Illinois	49.6	18.4	4.8	21.6	13.9	45.2	45.5	14.8	35.8
Scott County, Iowa (Quad Cities)	38.4	21.7	5.8	23.3	15.6	39.9	41.5	15.1	37.1

Source: 1954 Survey of Buying Power, By Sales Management, Inc.

Producer Goods: Producer Goods are those commodities that are used by industrial or commercial firms to produce some tangible endproduct. The term refers to such items as raw materials, fixtures, equipment and operating supplies used in the general conduct of business.

Along with the consumer goods market, the Producer Goods market has grown phenomenally in recent years. A comparison of the 1947 Census of Manufacturers figures with those of 1939 reveals that the number of manufacturing establishments in the United States increased from fewer than 174,000 in 1939 to almost 241,000 in 1947. The size of the labor force also provides a reliable criterion of size. The number of production workers in all manufacturing industries rose from 7,808,000 in 1939 to 11,916,000 in 1947, an increase of about 53% in the eight-year interval.

The change in size, or growth of the nations industrial and commercial plant is of vast importance, but perhaps of greater importance is the rate of growth of this plant.

One index which might measure this activity with a reasonable degree of accuracy is the expenditure for new plants and equipment. This index is important because it not only serves as a barometer for measuring present levels of activity but it also measures anticipated changes, attitudes of management, i. e., a faith or lack of faith in high future levels of productive activity. The national rate of spending toward this goal in 1949 was nearly four times that of 1939.

Producer Goods, like Consumer Goods, may be marketed on an international, national, regional, or local basis, the geographic scope of distribution being a function of the cost relationships discussed under Consumer Goods Markets. Thus from the standpoint of the manufacturer of the product it makes little difference in determining the geographic size of his market, whether he is producing consumer or producer goods. However the similarity ends at this point.

In attempting to measure or define the market for a particular product, two specific quantities must be included. One is the geographic location of the market, the other is the size, or potential quantity of the product whose sales are associated with this location. In the case of the Consumer Goods Market, this problem of measurement is not too difficult. It is a matter simply of determining the total sales (retail or wholesale or both) within the area in question--information which is readily available in this form.

The market potential can be estimated by determining the population and wealth of the area. The element that enables measurement of the consumer Goods Market to be made on such a relatively simple basis is the fact that Consumers confine their purchases to small geographic areas. That is, total sales in any given market center provide a reliable index of the entire consumer product market for the immediate area served by this center.

This is not the case however with Producer Goods. The industry and commerce located within this same Consumer Market center may very likely purchase substantial quantities of commodities from suppliers, great distances away. However,

it is possible to impute the size of the Producer Goods market, within rather broad limits of accuracy, as a result of studies of marketing characteristics.

Estimates made some time ago indicated that about 50% of all goods marketed at wholesale found their way to industrial and commercial consumers and that of all goods manufactured approximately 44% were sold as producer goods. * Thus the records of local retail and wholesale sales as treated in the section on Consumer Goods can be used to give a rough estimate of the size of Producer Goods sales, but will generally be underestimated in areas of high industrial concentration and overestimated in areas of little industrial activity.

A more direct means--one that is likely to be of greater validity in estimating the size of the Producer Goods Market--is merely the comparative concentration of industries within the area in question.

National Market: As was pointed out before, Peoria is near the nation's center of population and thus is also close to the nation's center of manufacturing although the geographic location of the latter is probably farther northeast of the population center. For the location of the large Standard Industrial Metropolitan Areas, which provide an index of manufacturing concentration, see the map on page 114.

Regional Market: Treating regional markets for producer goods in the same terms as was done for consumer goods, the largest regional market could be that titled by the U. S. Department of Commerce as the "Central Section" of the United States (see map on page 114). Of the 53 Standard Industrial Metropolitan Areas in this country, 21 lie within this region. Using the "Value Added" concept of industrial activity, it is found that 36% of the nation's manufacturing industries are concentrated in this region. **

The "Value Added" in manufacturing gives one comparative measure of industrial activity in any region and therefore can be used for estimating producer goods markets in that area. Another more direct measure of the size of the market for certain types of producer goods is the Expenditures for New Plant and Equipment. In 1947 (the last year for which these figures are available) the "Central Section" spent over two billion dollars for plant and equipment. This represented 37% of the nation's expenditures.

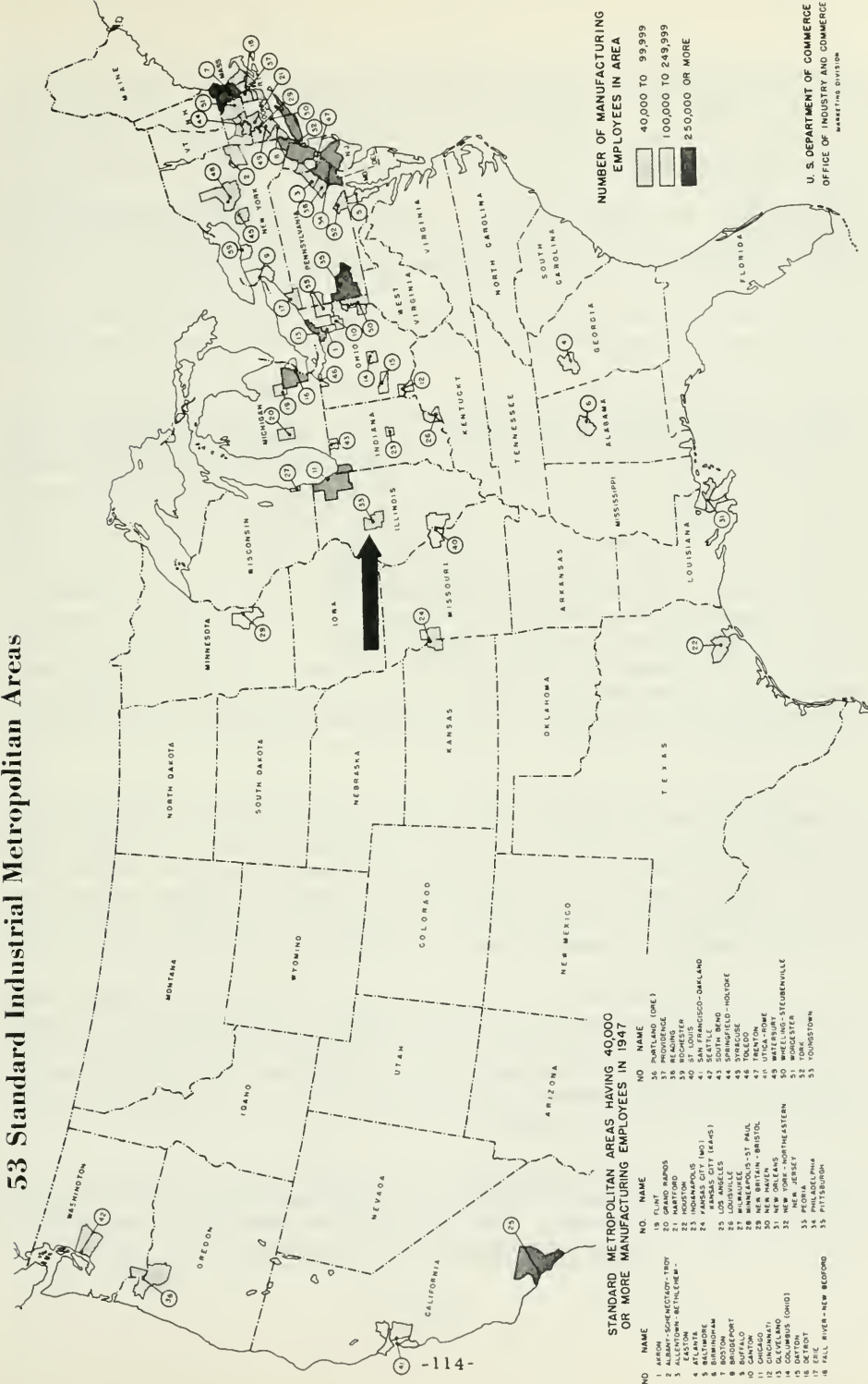
These figures show that there is even a higher concentration of the national producer goods market in this region than of consumer goods.

Treating a smaller regional market, as was done with consumer goods, it is important to note the size of the producer goods market in the State of Illinois (plus St. Louis). Again using the "Value Added" to manufactured products as a

* In Bibliography "Size of the Industrial Market", T. N. Beckman, Journal of Marketing, July 1939.

** Based on figures from the 1949 Census of Manufacturers, Volume III, U.S. Department of Commerce.

53 Standard Industrial Metropolitan Areas



STANDARD METROPOLITAN AREAS HAVING 40,000 OR MORE MANUFACTURING EMPLOYEES IN 1947

NO.	NAME	NO.	NAME	NO.	NAME	NO.	NAME
1	ALBANY	19	FLINT	36	INDIANAPOLIS	53	WICHITA
2	ALBUQUERQUE	20	FORT WORTH	37	INDIANAPOLIS	54	WILKINSON
3	ALBUQUERQUE	21	FORT WORTH	38	INDIANAPOLIS	55	WILKINSON
4	ALBUQUERQUE	22	HARTFORD	39	INDIANAPOLIS	56	WILKINSON
5	ALBUQUERQUE	23	HARTFORD	40	INDIANAPOLIS	57	WILKINSON
6	ALBUQUERQUE	24	HARTFORD	41	INDIANAPOLIS	58	WILKINSON
7	ALBUQUERQUE	25	HARTFORD	42	INDIANAPOLIS	59	WILKINSON
8	ALBUQUERQUE	26	HARTFORD	43	INDIANAPOLIS	60	WILKINSON
9	ALBUQUERQUE	27	HARTFORD	44	INDIANAPOLIS	61	WILKINSON
10	ALBUQUERQUE	28	HARTFORD	45	INDIANAPOLIS	62	WILKINSON
11	ALBUQUERQUE	29	HARTFORD	46	INDIANAPOLIS	63	WILKINSON
12	ALBUQUERQUE	30	HARTFORD	47	INDIANAPOLIS	64	WILKINSON
13	ALBUQUERQUE	31	HARTFORD	48	INDIANAPOLIS	65	WILKINSON
14	ALBUQUERQUE	32	HARTFORD	49	INDIANAPOLIS	66	WILKINSON
15	ALBUQUERQUE	33	HARTFORD	50	INDIANAPOLIS	67	WILKINSON
16	ALBUQUERQUE	34	HARTFORD	51	INDIANAPOLIS	68	WILKINSON
17	ALBUQUERQUE	35	HARTFORD	52	INDIANAPOLIS	69	WILKINSON
18	ALBUQUERQUE	36	HARTFORD	53	INDIANAPOLIS	70	WILKINSON

NUMBER OF MANUFACTURING
EMPLOYEES IN AREA

40,000 TO 99,999
100,000 TO 249,999
250,000 TO 499,999
500,000 OR MORE

U. S. DEPARTMENT OF COMMERCE
OFFICE OF INDUSTRY AND COMMERCE
MARKETING DIVISION

measure of the level of industrial activity and therefore an estimate of the market, it is found that this region accounts for more than 10% of the country's total. Expenditures for Plant and Equipment in 1947 for this region were over 540 million dollars, one of the highest in the country for a geographic area of comparable size.

Local Market: The local market, as identified by the Peoria Metropolitan Area, added a value of over 280 million dollars in its manufacturing activity and spent almost 34 million dollars in new plant and equipment in 1947.

It is possible when dealing with a more localized area such as the Peoria Metropolitan Area, to be somewhat more explicit in the measurement of the size of the producer goods market.

Although it is not possible to express the actual dollar value of commodities purchased by local industries, it is possible to gain a reasonable estimate of at least the relative size of these purchases. As can be seen in the data presented in Chapter VI of this report (table A6-5, page 562), there is a high concentration of machinery manufactured in this vicinity. The industry was sufficiently large to employ over 57% of the industrial labor force in 1947. The machinery industry is dominated by Caterpillar Tractor Co. which purchased in that year over 110 million dollars worth of materials, supplies and services. These purchases grew to a maximum of almost 279 million dollars in 1951. The next two largest local concerns in this industrial category are the LeTourneau-Westinghouse Company and the Hyster Company. The sum of these companies purchases in 1953 were in excess of six million dollars. These three firms are the only sizeable Peoria area plants manufacturing machinery. Their purchases represent the most significant Peoria area requirements for the commodities listed above.

The major purchases presently made outside of the Peoria area by the local machinery industry in terms of dollar value include such fabricated products as internal combustion engines, pumps, turbines and compressors, electric motors, generators, bearings, gears, and metal fasteners. Substantial quantities of basic metals (rolled, forged, stamped, and cast products), rubber and leather products (tires, hose, etc.), paint and paint products, packaging materials (paper, wood, glass), and factory supplies are also purchased from suppliers some distance from Peoria.

Next in size to the machinery industry is that of Distilling and Brewing. Various grains and grain products constitute the principal raw materials for these processes. An indication of the size of these purchases made in 1953 may be had by referring to Chapter II (Grain Marketing). In addition to these purchases, large quantities of packaging materials (glass, metal, etc.) are purchased by this industry from sources out of the immediate area.

The remainder of the larger industrial plants in the Peoria area is dispersed among the Primary Metals Industry, Printing and Publishing, Fabricated Metal Products, and Paper and Allied Products. In almost all of these industries the major portions of the raw material purchases are now made from sources out of this area.

The extent of the local producer goods market may be summarized at least qualitatively if not quantitatively by referring to the list of specific industries and their products contained in Chapter II, pages 58 to 63.

The market for Producer Goods centered about the Peoria Metropolitan Area is of considerable note. Over one-third of the nation's industry is located within a radius of a few hundred miles of the city. Peoria is located near and is almost equidistant from two of the nation's largest industrial cities which provide major, concentrated producers goods markets. Transportation facilities are well developed (see Chapter IX) and particularly well orientated for service to Chicago and St. Louis.

Finally the local market is substantial in producer goods of some specialized varieties as outlined earlier. * These conditions all point to quite definite competitive advantages occurring from the establishment of manufacturing facilities for the production of both Consumer and Producer goods in the Peoria Metropolitan Area.

* Fabricated metal products, rubber, leather products, etc.

CHAPTER V

POWER AND FUEL

ELECTRIC POWER: Electric power, and natural gas are provided to the entire Peoria Metropolitan Area by the Central Illinois Light Company. (See map on next page.) This company is the only utility concern serving the Peoria-Tazewell county region, although there are other generating stations in the area, notably the Commonwealth Edison facility at Powerton, just south of Pekin.

The Central Illinois Light Company's generating plants are located on the Illinois River. The Liberty Street Station in down-town Peoria has a present capacity of 25,000 Kilowatts.* This station also provides a limited amount of steam to near-by buildings for heating purposes.

Almost directly across the river from the Liberty Street Station in Peoria, is the R. S. Wallace Station in East Peoria, the main generating plant. This facility has a present capacity of 201,400 Kilowatts, providing for a division total of 226,400 Kilowatts.

The greatest power demand on the utility to date occurred in June of 1954, at which time a peak of 178,710 Kilowatts was reached. This leaves, even at peak a surplus of almost 50,000 Kilowatts, an amount sufficient to support considerable industrial expansion.

An idea of the flexibility of the generating facilities and the progressiveness of the concern may be gained from a brief review of the company's development.

The Central Illinois Light Company has more than kept pace with industrial expansion in the Peoria Area. In the 1929 to 1949 era the increase in the capacity of generating equipment was a few per cent lower than the increase in industrial activity as measured by the "Value Added" concept.

In 1953 a 60,000 Kilowatt generator was installed representing an increase of over 40% of the total 1949 capacity. This brings the current total generating capacity at the East Peoria Plant to 201,400 Kilowatts. Providing this capacity are six generators: two 23,200 Kilowatts, one 25,000 Kilowatts, two 35,000 Kilowatts and one 60,000 Kilowatts capacity.

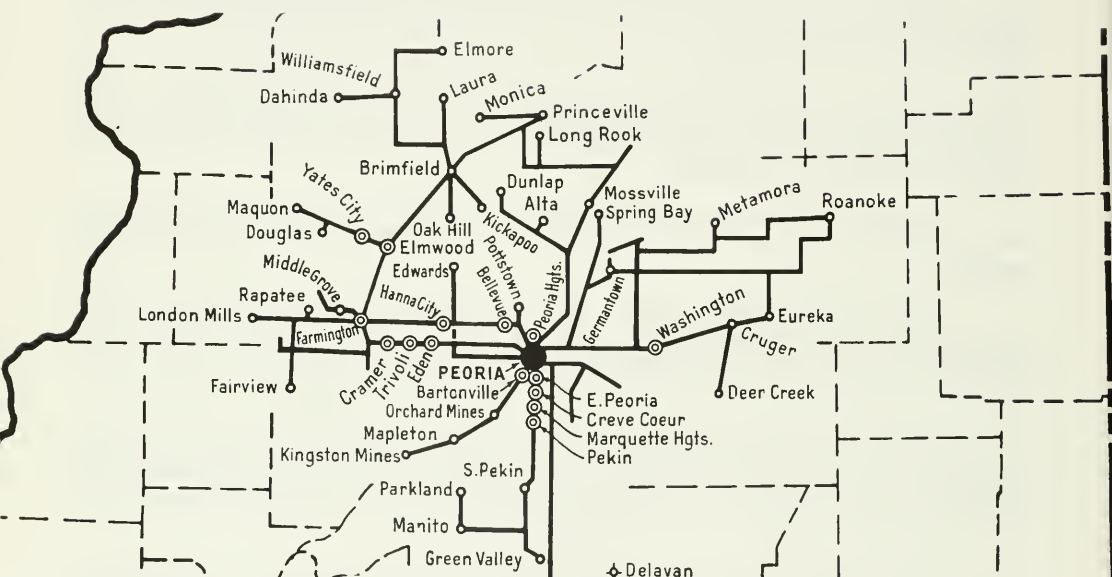
An indication that the company plans to continue to provide adequate facilities for utilities service was the recent announcement of a multi-million dollar expansion plan. A plan which calls for regular stepped increases in capacity over a period of future years.

In addition to the present generating facilities mentioned above the plants are interconnected with other utilities to provide a power pool for mutual assistance in case of emergencies. A condition obviously providing for greater reliability of service to the consumer.

A well developed system of transmission and distribution lines cover the two-county area (see map 1) bringing high voltage service to most of the incorporated cities of Peoria and Tazewell Counties. High voltage transmission lines serve Creve Coeur, Pekin, Washington, Metamora, Roanoke and Eureka to the east of the Illinois River and Farmington, Elmwood, Princeville and Bartonville to the west.

*All generating capacity figures are equipment manufacturers name plate values.

Map I
CENTRAL ILLINOIS LIGHT COMPANY TERRITORY



Legend:
Gas and electric service.
Electric only.

Of particular interest is the service provided the specific sites that are available for industrial purposes. A detailed description of this is provided in Chapter 2, pp 70 in connection with land suitability.

The geographic location of the local utility company provides it with some natural economic advantages. The most important of these is the close proximity of a good grade of bituminous coal. A testimony to the competitive locational advantage of this area was the construction in Tazewell County, in the 1930's, of the large Commonwealth Edison plant which was designed to provide the Chicago area with its electric energy.

Specific industrial power rates depend on so many variables that it is beyond the scope of this report to present cost data. The Light Company, of course, is quite ready to supply detailed electric cost estimates upon request.

NATURAL GAS: Natural gas is distributed in Peoria, East Peoria, Bartonville, Creve Coeur, Pekin, Washington, Elmwood and Farmington by the Central Illinois Light Company. The gas is delivered to the area by transcontinental pipe line from the gas fields of Kansas, Oklahoma and Texas.

At the present time new customers are limited to 4000 therms per month if using it on a firm basis. However, larger users may be served on an interruptible basis the year around, or on off-peak basis from April 1st. through October 1st.

The Transcontinental Pipe Line Company has filed with the Federal Power Commission a request to increase the capacity of their system by approximately 50%. This increase will make additional gas available to the Peoria area. Further details on Central Illinois Light Company's gas service are provided in chapter 2, pp 25. Gas rates, and conditions of service are included in the appendix to Chapter 2, Tables A2-2, pp 499.

The availability, costs and quality of other common industrial fuels are treated under Chapter 2, pp 18-27.

Undoubtedly the largest single factor influencing the growth of a city is the ability of the area to attract and support industry which does much of its selling outside the area. One of the prime requisites for this type of industry is, good transportation facilities. Located on the Illinois River, one of the major midwestern water thoroughfares of the riverboat days, Peoria met this requirement. Vital to any industry is the availability of sources of raw material. This was probably the main reason for the establishment of the most important industry in early Peoria - brewing and distilling. Both brewing and distilling demand large quantities of grain which is readily available from the rich midwestern farm land surrounding Peoria. Along with this, the artesian well water of Peoria was found very desirable for use in these industries. Another of the important industries of the early days of Peoria's industrial development settled here originally because of the proximity of a large market for farm machinery and implements.

For all practical purposes, the evolution of Peoria's industrial pattern began around 1860, when, as in most areas, much manufacturing was still carried on in neighborhood shops. At this time, the brewing and distilling industry accounted for 31.8% of the total value added¹ by manufacture in the area while the manufacture of farm machinery provided 19.1% of the value added.

The importance of having a market for the products of industry in the immediate area was diminished by the development of bigger and better transportation facilities. Although river traffic, and thus one of the advantages of being located on a river, declined, Peoria never lost its advantages as a shipping center. These were, for instance, central location, good railway service, and location on a dividing line between railway freight rate districts. See Chapter 9 on Transportation for further details.

These were two major reasons for the establishment of many industries in Peoria during the industrial evolution around 1900. Transportation facilities and location played a large part in the decision of the Holt Manufacturing Company of Stockton, California, to move its eastern facilities to Peoria. This company had invented a track-type tractor in 1904 and, in establishing their headquarters in Peoria, laid the foundation for Peoria's becoming a center of earth moving machinery production of the world. The first tractor, a 45 horsepower unit, rolled off the Peoria assembly line in late 1909. In 1925, merger with a competitor changed the company name to the now famous Caterpillar Tractor Company. The location of this factory in Peoria was the most important single incident in the development of industry in the area. Even today, the Caterpillar Company is the most important industry, supplying about 20% of the total industrial employment in the two counties of the Peoria Metropolitan Area.

One of the most interesting facets of the industrial history of Peoria, is the relative stability which it enjoyed over the turbulent years from 1929 to 1939. During this period, although there were fluctuations in the years between, employment actually increased while both State and National employment declined. (See Table 1, pp 122.

There were probably many factors contributing to this phenomenon, however, two are outstanding. In order to go through such a period relatively unscathed, it is necessary for the affected area to possess some form of industry

¹ Difference between the final value of the product and the initial value of the raw material.

CHAPTER VI

INDUSTRIAL DEVELOPMENT

capable of absorbing a large number of workers left idle by industries, such as those manufacturing durable goods, which are the hardest and earliest affected. Near the middle of the decade under discussion, the repeal of prohibition reopened Peoria's breweries and distilleries and thus, provided it with an industry capable of at least partially taking up the slack. At about the same time, the federal government began its huge public works program which involved the expenditure of large sums of money on heavy earth-moving machinery. Since this type of equipment was among the earliest purchased, Peoria was one of the first areas to feel the economic relief afforded by the program.

Even earlier than this, Peoria had shown its strong growth characteristics. In the decade between 1919 and 1929, for instance, while employment on a national schedule declined, in Peoria the number of persons employed increased.

In general, Peoria employment increases were above those of the nation but below those of the State until around 1929. Since then the area has ranked above both the nation and the State in this respect, as shown in Chart 1. Chart 2 indicates growth by a comparison of the change in value added in manufacturing.

The area comprising Peoria and Tazewell Counties was designated by the 1947 Census of Manufacturers as the Peoria Standard Metropolitan Area on the basis of its employment of over 40,000 persons in industry. This method of classification is called the Standard Industrial Classification System.* The industrial status of Peoria is reflected in the fact that only two other local areas Chicago and St. Louis, qualified as standard metropolitan areas.

By the Standard Industrial Classification System, industry is divided into twenty major categories, each of which is in turn divided into the necessary subdivisions to cover the industry. The latest information of this nature for divisions of the United States is contained in the 1947 Census of Manufacturers. The results of this survey are quoted in even the latest government publications which contain information concerning industry. Certain other data, dealing for the most part with employment figures, are available in the 1950 Census of Population; these figures have been used in this section and, more extensively in the section on Labor Characteristics. Also included in the material on labor are current employment figures from the Bureau of Labor Statistics. Complete tables taken from this material may be found in the appendix; outstanding points will be taken up in the text.

In 1947 there were 278 manufacturing establishments in the Peoria Metropolitan Area, 240 of which employed less than 100 persons. This number, 86% of the total, compares with the state-wide concentration of 87%. Of the manufacturers in the area, six or 2.2% employed over 1000 persons as compared to 1% on a state-wide basis.

The relative diversity of industry in the Peoria Area, is illustrated in Chart #3. Three industries supply a higher percentage of Peoria's industrial employment than the corresponding Illinois industries account for in the State as a whole. Two Peoria industries (machinery and foods) are more concentrated in this respect than are the same industries on a national scale. The heavy preponderance of the machinery and foods industries are illustrated in the graph.

*See Chapter 7, pp 130, for detailed definition.

TABLE 1

Peoria Standard Metropolitan Area
Growth In Employment

Base: 1860 equal to 100

Source: Table A6-4

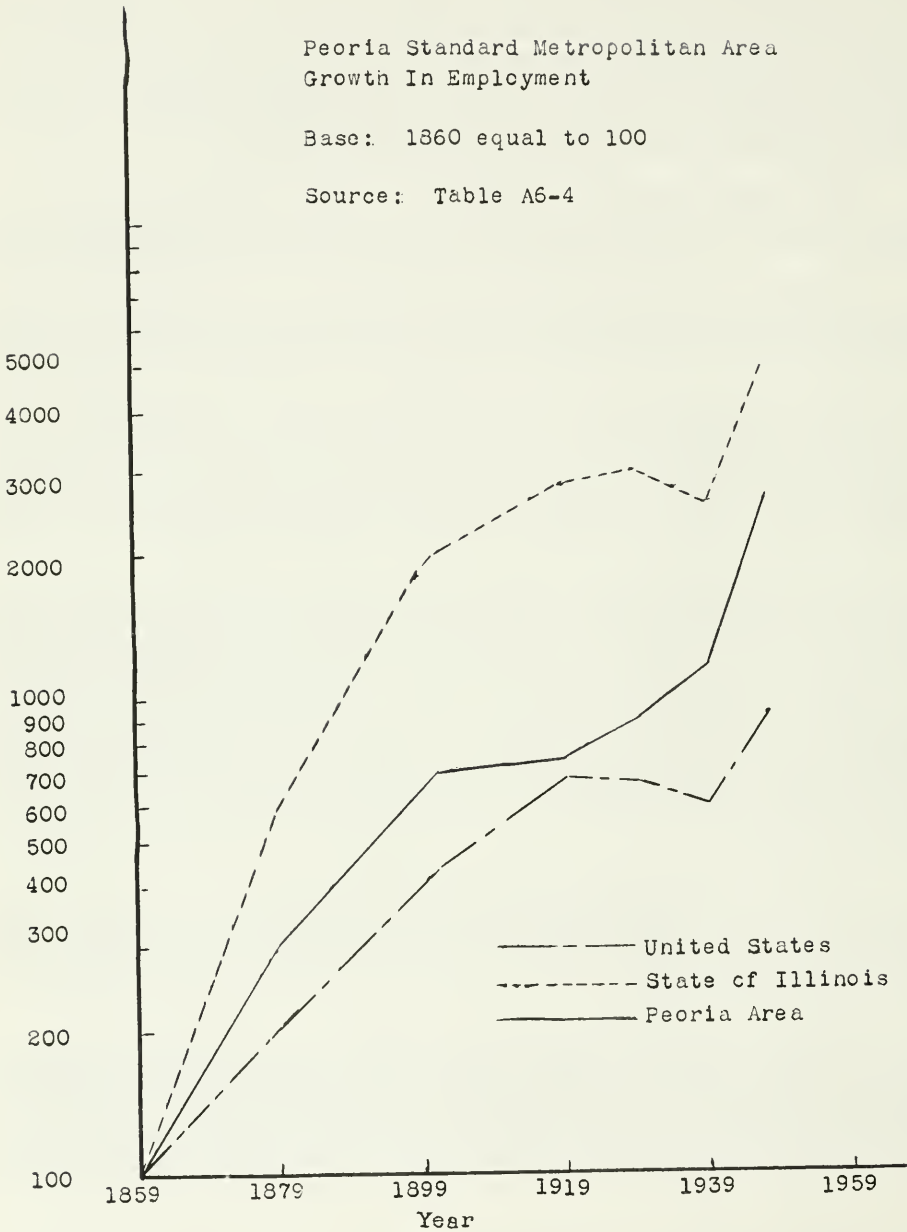
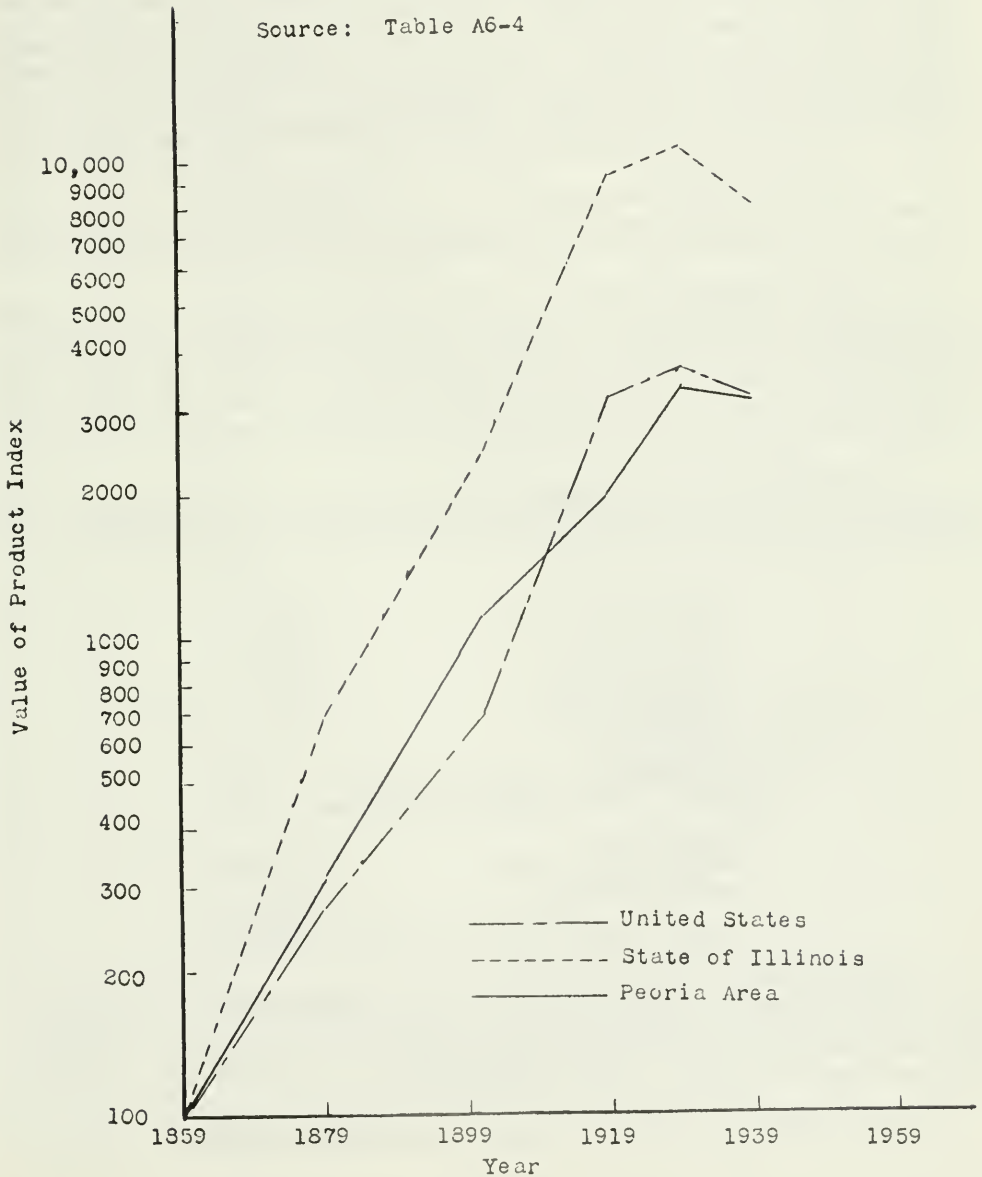


CHART 2

Peoria Standard Metropolitan Area Growth in Value of Product

Base: 1860 equal to 100

Source: Table A6-4



Although previous statements serve the purpose of pointing out the development pattern in the area, they certainly do not give any indication of what type of industry could be supported. By showing in what fields relatively few establishments exist, however, they do provide a starting point for analysis.

As an example, the category, "Apparel and Related Products" shows Peoria far below the concentration of this industry in the State, and the Nation. Considering the fact that a Peoria dress manufacturer, Princess Peggy, Inc. now serves a nation-wide market, this deficiency seems to indicate a fertile area for development in Peoria. The existence of this company, which employs 700 women, produces low price-line house dresses for direct-to-retailer sale. It is affiliated with no other firms. The ability of this company to produce low priced merchandise on a competitive basis nationally certainly indicates the feasibility of further development of this type of industry in the Peoria Area.

In 1950, of a total employment of 100,681 persons, 38.2% was accounted for by manufacturing firms. The 1950 Census of Population shows 305 manufacturing firms employing a total of 38,528 persons.

Heavy dependence upon the so-called durable goods industries, as is the case in Peoria, can be both an advantage and a disadvantage to an area. Generally speaking, these industries employ a larger number and pay higher wages than do the non-durable industries during good business periods. However, the replacement of durable goods can be, and usually are, postponed indefinitely during difficult periods. For this reason, the durable goods industries are the first to feel the decrease in business and the last to return to normal.

The 1950 Census of Population indicates that 69% of all industrial employment in this area was provided by the manufacturing of durable goods. The following table shows the percentage of industrial employment provided by durables in several midwestern cities:

Youngstown, Ohio	92%
Dayton, Ohio	77%
Fort Wayne, Ind.	77%
South Bend, Ind.	76%
Cincinnati, Ohio	54%
Louisville, Ky.	49%

Source: W. G. Pinnell, An Analysis of the Economic Base of Evansville, Indiana

Rockford, Ill.	85.9%
Davenport-RI-Moline	83.9%
State of Illinois	61.6%

Source: 1950 Census of Business

Although Peoria does not rank particularly high among these midwestern cities in durable product employment, the situation leaves room for improvement. Since further reduction of this figure would tend to impart greater stability to the area, non-durable goods manufacturers, for instance the already-mentioned apparel industry, should be encouraged.

As in the past, the economic stability of the area will depend to some de-

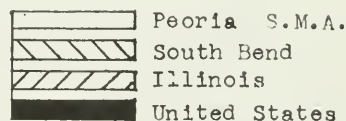
INDUSTRIAL EMPLOYMENT PROVIDED BY SPECIFIED INDUSTRIES

TYPE OF INDUSTRY

Miscellaneous	39
Instruments & Related	38
Transportation Equipment	37
Electrical Equipment	36
Machinery	35
Fab. Metal Products	34
Prim. Metals Industries	33
Stone, Glass, Clay Prod.	32
Lea. & Lea. Products	31
Rubber Products	30
Prod. of Petro & Coal	29
Chemical & Allied Prod.	28
Printing & Publishing	27
Paper & Allied Products	26
Furniture & Fixtures	25
Lumber & Wood Products	24
Apparel	23
Textile Mill Products	22
Tobacco Manu.	21
Food & Kindred Products	20

CHART 3

Source: Tables A6 - 11 & 1



gree upon the food industry, which provides over 20% of the industrial employment. An increase in this and other types of non-durable production would somewhat relieve the present dependence upon the durable goods industry and thus result in an improved situation.

Reference to the table on Non-agricultural Wage and Salary Workers,* under the section on labor, points out that the area has not progressed in this direction. In the years between 1950 and 1954, the percentage of industrial employment provided by durable manufactures increased from 69% to 73.4%. It is important to note, however, that the latter figure comes from data gathered by the State Department of Labor, whereas the former is from the Census of Population. The difference between the methods employed by these two sources in gathering might affect the comparison to some extent. However, the comparison, it is felt, does point out the trend since both sources are reliable.

Of importance to an industrial city is the size of the manufacturing establishments in the area. A large number of small firms, rather than a small number of large firms, is generally considered more desirable from the standpoint of economic stability. Reference is here made to Chart 4 and to table A6-13. It may be seen that Peoria and the state practically have the same percentage, (86% and 87%) of firms employing less than one hundred workers. Considered alone, this factor seems to show a good characteristic. It is important to realize, however, that the percentage of employment provided by these industries is of far greater importance. To determine the significance of the above figures, we need only consider the fact that one Peoria firm employs roughly 20% of the total industrial employment and note that five other firms employ more than 1000 persons each. Seen from this angle, the significance of the large percentage of small firms in the area is diminished considerably. This is indeed a matter of rather deep concern, and points out another area to be considered in the future development of the area.

In conclusion, a short review of the two most important industries in the Peoria area is presented in the following section.

Machinery - Manufactured products, of this type, produced in Peoria include internal combustion engines, tractors, farm machinery, construction machines, and industrial trucks and tractors. In 1947, twenty-nine establishments, or 10.4% of the total, were engaged in the production of machinery. These plants employed nearly 25,000 persons, more than one fourth of the total manufacturing employment in the area. Caterpillar, the only company in the area employing more than 2500 persons, accounted for approximately three quarters of the machinery industry's employment. Of a total of \$33,905,000 spent on new plants and equipment in the area, the companies producing machinery used \$20,383,000.*

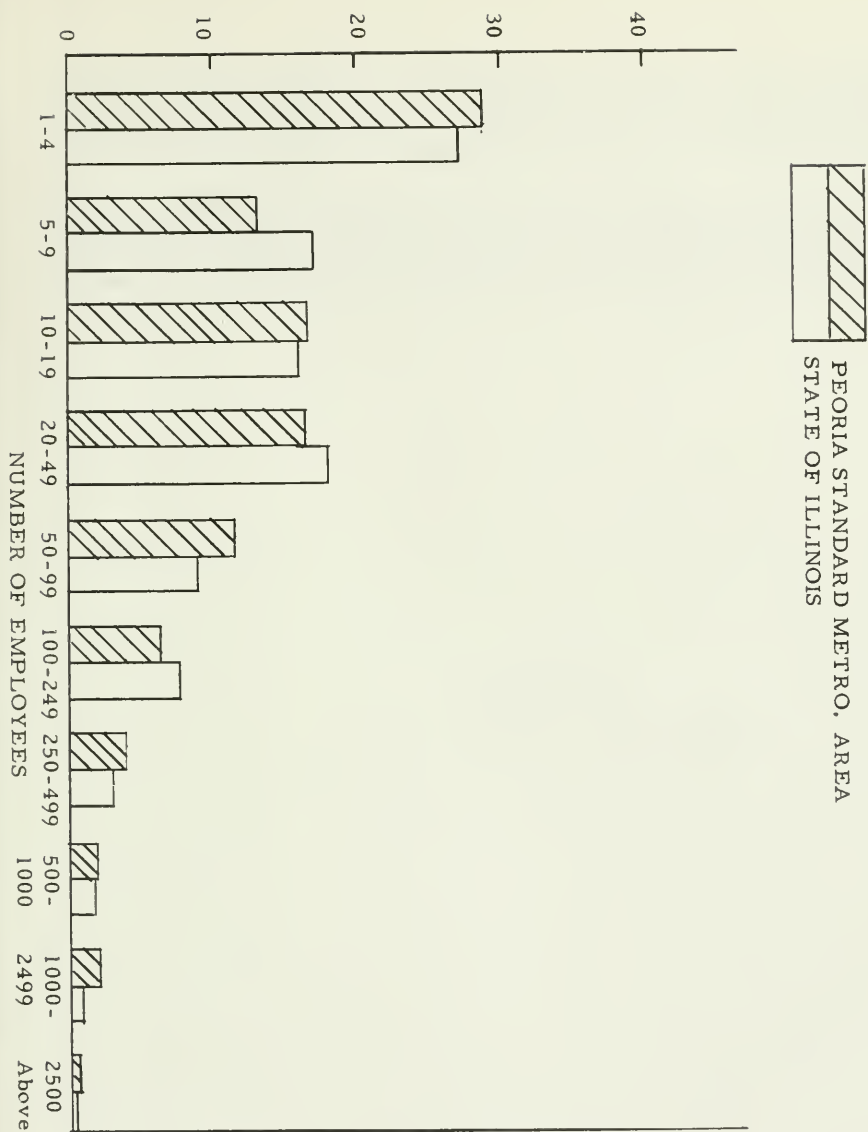
Food and Kindred Products - The unusually great importance of this industry in Peoria relative to other cities may be attributed to the brewing and distilling activity in the area. In 1947 there were 74 establishments engaged in the manufacture of food products; of these, nine were producing alcoholic beverages. These nine plants, however, provided more than half of the 21.25% of the total industrial payroll accounted for by the food industry.

*Chapter 7, Table 6 p 146.

*1947 Census of Manufacturers.

CHART 4

PERCENTAGE of ESTABLISHMENTS IN SIZE CATEGORIES



The home of the largest distilling concern in the world, Peoria employed 5,172 persons in distilling and brewing operations. The industry provided more than half of the employment of the food industry and nearly one-fifth of the total capital spent by industry for new plants and equipment in the area.*

With increased attention directed toward greater diversification and the attraction of non-durable industry, the Peoria Metropolitan Area should grow and prosper as in the past. Increased interest in this type of development should increase the stability of the area without significantly diminishing the advantage of a large amount of durable goods production during "boom" times.

*Lists of industries represented in Peoria and of those not represented are included in the appendix, Table A6-2, page 550, and Table A6-3, page 553.

CHAPTER VII

THE LABOR MARKET

THE LABOR MARKET

The following section is intended to familiarize the prospective firm with the salient features of the Peoria Area labor market. As will be discussed in more detail below, this area has many advantages to offer. Its labor force is large and diversified; the secondary sources makes the area amenable to ready expansion; labor is highly skilled. Wage rates and earnings are typical of highly industrialized areas; turnover is low, productivity is high and advancing rapidly. Unionization is widespread, particularly in manufacturing, but since unions are responsible and work stoppages are few, new firms can anticipate the stability and peace not possible in areas yet to become organized.

THE LABOR FORCE

The Bureau of the Census defines the Peoria Area labor market geographically and includes within the area Peoria and Tazewell Counties. The War Manpower Commission during the period of its operation in World War II defined a labor market as the widest area within which employees with fixed addresses would accept employment. The War Labor Board, on the other hand, thought of a labor market in terms of an area in which the wage structures and levels in an industry were fairly uniform.

All of these definitions consider a labor market as a geographic area. But an alternative definition might be to consider the labor market as a process rather than any specifically defined area. It can be thought of as the process by which supplies and demands for particular types of labor are balanced or seek to attain a balance -- a market place in which buyers and sellers of labor services meet.

Both types of definitions have their shortcomings, as well as their advantages. Any attempt to circumscribe an area geographically is deficient in that in some cases it is too inclusive, in others, not wide enough. For example, the labor markets of ministers, teachers, or tool and die makers have little or no reference to any limited area. They are region-wide and even nation-wide. The advantage of geographic definition, however, is that it lends itself more readily to statistical description. On the other hand, defining the labor market as a process has the obvious advantage of facilitating the abstraction and study of the factors that operate in the process of the exchange of the labor service. It is a more meaningful description if the object is to regulate or control the labor market processes, but does not lend itself readily to quantifications.

The final choice of definition must be made in relation to the problem being considered. The War Labor Board, for example, was concerned mainly with an equitable administration of wage rates and believed that where they found uniform rates, this was indicative of homogeneous labor market area reflecting a common set of forces which should not be disrupted. The War Manpower Commission was more concerned with the allocation of labor -- the problem of mo-

bility -- and its definition was likewise an operational one. The Bureau of Census is less concerned with the forces operating than they are with statistical description. However, more arbitrary geographic delineation would be quite meaningless, therefore, the divisions were made with a view toward including as a unit of measurement areas which are economic and social entities. Since the purpose of this report is descriptive in the main and since almost all the data which are available must be taken from the Census Bureau of agencies which group data on the same geographic basis, the most appropriate labor market designation is that which the Census Bureau has adopted -- the Peoria Standard Metropolitan Area - composed of Peoria and Tazewell Counties.

According to the latest Census of Manufacturers(1947), "the general concept applied" in the designation of a standard metropolitan area was "that an area should be an integrated economic and social entity with an attendant large volume of daily travel and communication between the central city and the outlying parts of the area. (This usually resulted in a standard metropolitan area considerably more restricted than the market or trading area.) The following principles were used in applying this general concept to the definition of the individual areas:

(a) Each standard metropolitan area must include at least one city of 50,000 or more; the area as a whole must have a total population of at least 100,000. Areas may cross State lines.

(b) Where two cities of 50,000 or over are within 20 miles of each other, they will ordinarily be included in the same area.

(c) Each county included in a standard metropolitan area must have either 10,000 nonagricultural workers or 10 per cent of the nonagricultural workers in the area, or more than one-half of the county's population must have been included in the "metropolitan district" as defined by the Bureau of the Census. In addition, nonagricultural workers must constitute at least two-thirds of the total employed labor force of the country.

(d) Each peripheral county included in a standard metropolitan area must be economically and socially integrated with the central counties of the area. A peripheral county has been regarded as integrated (1) if 15 per cent of the workers living in the county work in the central county of the area, or (2) if 25 per cent of those working in the county live in the central county of the area, or (3) if telephone calls from the county to the central county of the area average 4 or more toll calls per subscriber per month.

As already indicated, the dimensions of a labor market are manifold and description should be functional. Since this report is concerned with the problems of industrial location, this chapter on the labor market is presented to conform with that purpose, and the labor market designation of the Bureau of the Census is believed most appropriate. This chapter is an attempt to indicate the number of employees available, their skills, quality, and dependability, the legal framework within which an employer must operate, and some description

of the type of union organization and labor relations that can be expected within the Peoria area labor market.

The labor force is defined to include persons 14 years of age and over (not in institutions) working for pay or profit; working without pay for 15 hours or more weekly on a family farm or business; or looking for work. Also included as employed are persons with jobs but temporarily absent from work because of vacation, illness, industrial dispute, bad weather, or lay-off with definite instructions to return to work within 30 days of lay-off. Also included as unemployed are persons on public emergency work projects or who would have been looking for work except for temporary illness; because they expected to return to a job from which they had been laid off for an indefinite period of time; or they believed no work was available for them in the community.

In the 1950 census of population the Peoria Area was listed as having a total labor force of 104,977. About four out of every ten persons (41.9%) either had a job or were seeking one. However, the available labor supply should be thought of as even greater than this census figure indicates. Contiguous to both Peoria and Tazewell County and approximately equal in distance at its extreme from the areas of industrial concentration as are the extremes of the two counties included in the standard metropolitan area is Woodford County. There is no way of estimating the number of residents in Woodford County who are currently employed in the Peoria Area. Although its population is only 21,335 its proximity to this highly industrialized area indicates that as a source of labor supply it cannot be discounted. Woodford is largely an agricultural area, but is additionally a secondary source of labor in times of market tightness.

An important indicator of the suitability of the area to industrial development in addition to the actual size of the labor force at any moment of time is the growth record. To what extent is the area able to meet the labor needs of expanding industry? While no data are available on the changing size of the labor force in the Peoria Area this growth is reflected in the changing volume of employment in manufacturing. These figures are presented in Table 1, page 132 and are depicted graphically in Chart 1, page 133. While the entire economy has had a phenomenal growth since 1929, the record for the Peoria Area is even more startling.

Employment in manufacturing has increased since that year by more than three times, as compared to only a doubling of employment in the country as a whole and in the State of Illinois.

Several reasons can be advanced to explain this rapid growth:

(1) Peoria, in common with the nation as a whole, has had a tremendous upsurge in population as noted in Chapter 3 dealing with populations.

(2) The areas surrounding Peoria (particularly Woodford County) which are within commuting distance, are largely agricultural and as the need for additional labor arises, many people come to the city to accept employment rather than continue working in the rural areas.

(3) Peoria, as the second largest city in Illinois, is a mecca for young people from the outlying agricultural areas who are drawn here in search of employment.

TABLE I - NUMBER OF EMPLOYEES, PERCENTAGE CHANGE
IN EMPLOYMENT IN MANUFACTURING FOR THE U. S., ILLINOIS,
AND THE PEORIA STANDARD METROPOLITAN AREA:
1929-1953; (1929 = 100%)

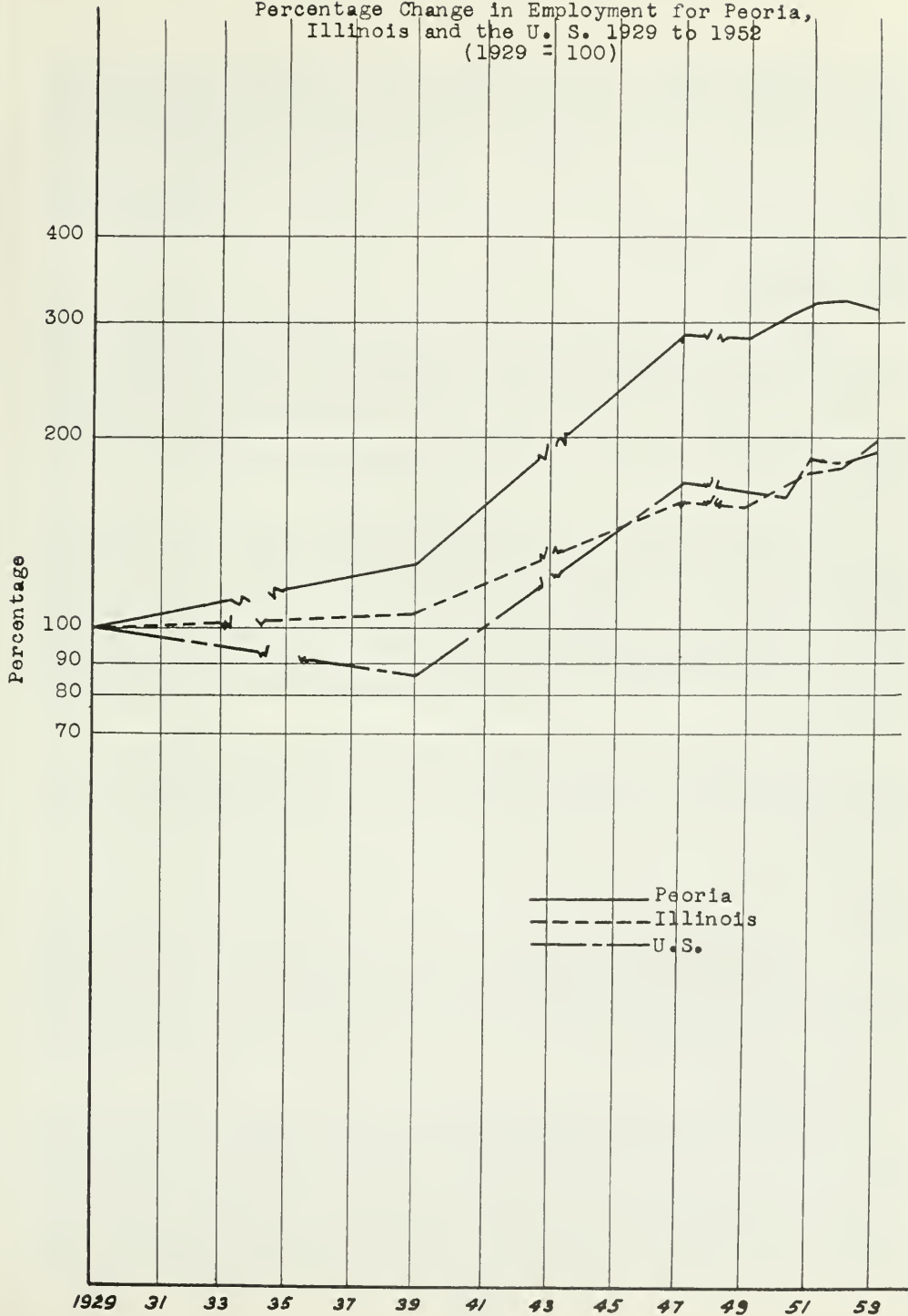
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	<u>United States</u>		<u>Illinois</u>		<u>P. S. M. A.</u>	
	No. of Employees	% age Change	No. of Employees	% age Change	No. of Employees	% age Change
1929	8, 838, 743	100	691, 555	100	14, 773	100
1939	9, 527, 306	108	596, 476	86	18, 960	128
1947	14, 294, 304	162	1, 184, 820	171	42, 511	288
1949	13, 880, 050	157	1, 127, 900	163	41, 825	283
1950	14, 769, 931	167	1, 135, 955	164	44, 650	302
1951	15, 612, 619	177	1, 243, 681	180	47, 850	324
1952	15, 944, 379	180	1, 253, 543	181	48, 525	328
1953	17, 259, 000	195	1, 326, 100	192	46, 525	315

*Data for 1949, 1951-1953 are as at May 15

Source: Department of Commerce
Illinois Department of Labor

Figure 1.
 Percentage Change in Employment for Peoria,
 Illinois and the U. S. 1929 to 1952
 (1929 = 100)



(4) Finally, Peoria (particularly since World War II) has been a dynamic, expanding area. As discussed previously, as having arbitrarily drawn geographic boundaries. As the area expands and provides additional economic opportunity new families migrate from all over the country. Evidence of this was the large flow of families and workers from many of the southern states to this area in the past few years. The attraction of economic opportunities is particularly appealing when the economy is at less than full employment -- a condition which prevails at the present time.

Age Distribution

About three out of every four persons in the employed labor force (1950) were men, and three out of every four were between the ages of 20 and 54. Prior to the age of 20 the great bulk of boys and girls are in school and as can be seen in Table A-1, Appendix, the percentage of those employed rises with advance in age. A rapid jump is from the 18-19 years old group to the 20-24 years old group. By the middle twenties almost all men have left school and are in the labor force.

By the middle forties physical disabilities begin to play a more important role and in the middle fifties retirements, either forced or voluntary become increasingly important. The percentage of jobs held by men over 65 is relatively small due to physical infirmities, retirement, and of course, the fact that they are relatively smaller in number in the age composition of the population. With advances in gerontology and life expectancy and the consequent increase in numbers of this age group, they should become an increasingly important segment of the labor force.

The age distribution of employment follows this general pattern in all industries although there are expected differences in each depending upon the physical requirements, ease of entry into the trade, etc. These differences can be noted in Table A-1, which presents data on age distribution of employed by industry.

Nativity

More than 90% of the population of the Peoria Area, from which the labor force is drawn, is native born. Of the remaining portion about 25% are of German origin and the rest represent in fairly equal proportions most of the major European countries.

Color Composition

Of a total employed labor force in the area, in 1950, of over 100,000, non-whites comprised only approximately 2%. The white and non-white subgroups have a somewhat different pattern of labor force participation, based to a large extent upon differences in the degree to which the groups are accepted or rejected as workers in particular industries and occupations. Although the proportion of non-whites is slightly higher than the national average, in view of

the relatively small number of non-whites in the area occupational and industry differences in distribution are not significant. Table 2, on page 136 is a distributional breakdown of employed by race and occupation, and Table 3, on page 137 provides a distribution of employment by industry.

Class of Worker

Table A-2 in the Appendix is a breakdown of the class of workers in the Peoria Area, as well as in the other nearby standard metropolitan areas. Figure 2, on page 138 depicts this for the Peoria area. It will be noted that no significant differences exist in the distribution of workers by class in any of these areas. The distribution by class of worker depends upon two major factors -- the method of defining the class and the economic features of the area. Peoria is typical of these other areas in those economic aspects which are reflected in the numbers in each class.

As defined by the United States Census of 1950, any person who drew wages or salary from a non-governmental concern was classified as a "private wage or salary worker." Those who earned wages or salary while working for a governmental organization were grouped as "governmental workers." A "self-employed worker" was one who either worked by himself and for himself or hired people to work in his economic enterprise, but who drew no wages nor salary from the enterprise. If he paid himself wages or salary, even though he owned the enterprise, he was considered a "private wage or salary worker." A person classified as an "unpaid family worker" if he helped a member of his family carry on a business enterprise such as a farm or store but received no pay for his services.

As can be readily recognized, many employed persons have a dual status and the method of allocating their status will have an effect upon the class of worker distribution.

The second important determinant of the distribution is the type of economic organization of the area. An obvious illustration is an economy which is largely socialized. The "private wage and salary worker" groups would be negligible whereas the "government worker" group would be very large. The economic organization is extremely relevant on the local level since there are local differences even within a common national framework. For example, an area in which utilities are municipally owned would reflect this in its class of worker distribution; an area which is the seat of the state government and is not industrially developed will also have a higher percentage of government workers.

An area which is highly industrialized will have a relatively small percentage of self-employed, whereas an undeveloped area will have a larger amount of independent farmers and artisans.

On the basis of these economic considerations the distribution in the Peoria Area, as illustrated in Figure 2, is not surprising. Eight out of every 10 people employed in the area were private wage and salary workers in 1950, reflecting the high degree of industrialization to be found here.

TABLE 2 - RACE AND OCCUPATION OF EMPLOYED PERSONS FOR
P. S. M. A. - 1950

<u>General Occupation</u>	<u>Total</u>	<u>White</u>	<u>Negro</u>	<u>Other</u>
Professional, Technical, and Kindred Workers	8, 126	8, 049	66	11
Farmers & Farm Managers	3, 812	3, 810	2	0
Managers, Officials, and Proprietors, except Farms	8, 557	8, 504	45	8
Clerical & Kindred Workers	13, 844	13, 763	74	7
Sales Workers	7, 523	7, 504	16	3
Craftsmen, Foremen, and Kindred Workers	16, 444	16, 258	177	9
Operatives & Kindred Workers	22, 195	21, 681	506	8
Private Household Workers	1, 576	1, 284	292	0
Service Workers, except Private Household	8, 365	7, 677	677	11
Farm Laborers & Fore- men	1, 522	1, 521	1	0
Laborers, except Farm and Mine	7, 464	6, 922	534	8
Occupation not reported	<u>1, 131</u>	<u>1, 077</u>	<u>54</u>	<u>0</u>
	100, 559	98, 050	2, 444	65

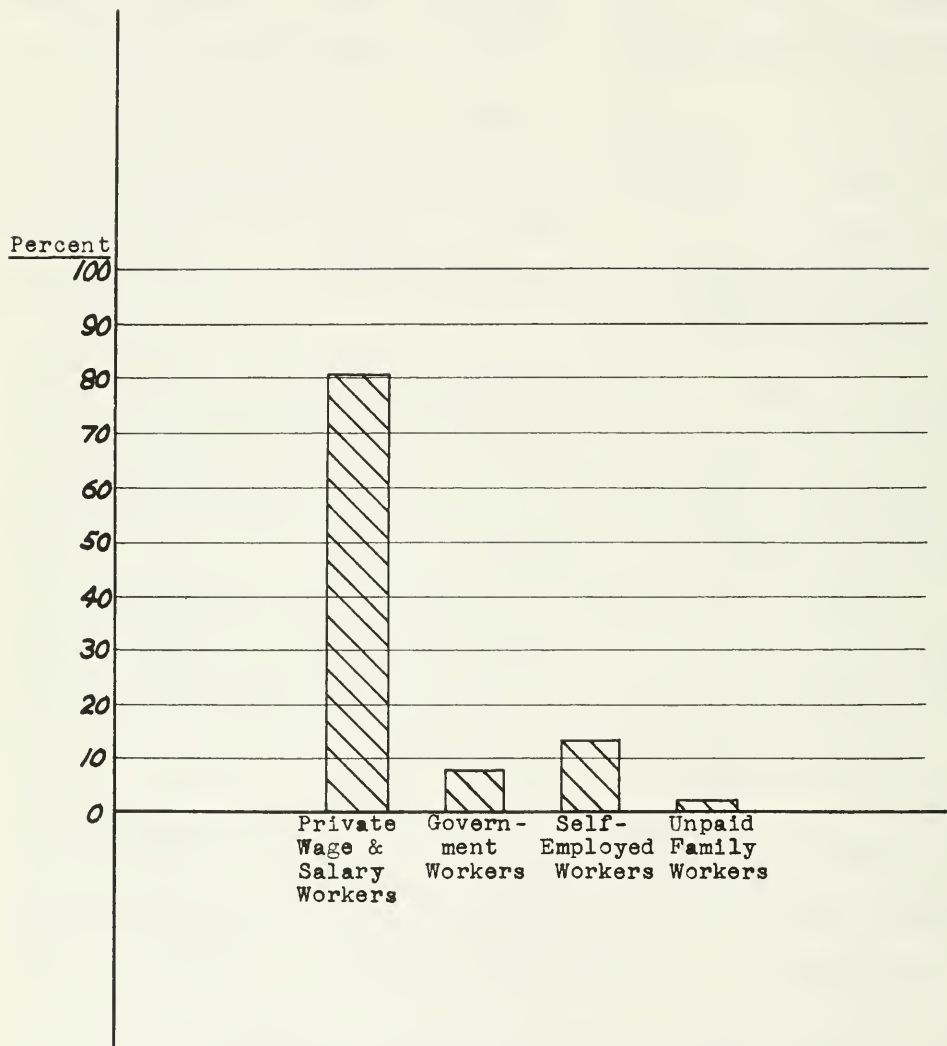
Source: Census of Population, 1950; Vol. II, Part 13, Table 77

TABLE 3 - RACE OF WORKER OF EMPLOYED PERSONS BY
INDUSTRY FOR THE P. S. M. A. - 1950

<u>Industry</u>	<u>Total</u>	<u>White</u>	<u>Negro</u>	<u>Other</u>
Agriculture, forestry, and fisheries	5,537	5,536	1	0
Mining	635	634	1	0
Construction	5,758	5,635	121	2
Manufacturing	38,481	37,730	744	7
Transportation, communi- cation, and other pub- lic utilities	7,528	7,366	158	4
Wholesale and retail trade	20,122	19,623	477	22
Finance, insurance, and real estate	3,081	3,036	44	1
Business and repair services	2,319	2,250	69	0
Personal services	4,836	4,340	484	12
Entertainment and recreation services	910	858	50	2
Professional and related services	7,701	7,492	195	14
Public administration	2,492	2,443	48	1
Industry not reported	<u>1,159</u>	<u>1,107</u>	<u>52</u>	<u>0</u>
Total Employed	100,559	98,050	2,444	65

Source: Census of Population, 1950; Vol. II, Part 13, Table 83

Figure 2.
Percentage Distribution
of Class of Worker for Peoria
1950



Approximately 12% were self-employed and represent in the main the independent farm operators in the area. About 6% were working for the government and unpaid family workers constituted an insignificant proportion of the total. While these data are for the year 1950, the forces which they reflect do not vary significantly in the short-run, and it is safe to assume that if current figures were available the proportions would be almost identical.

Occupational Distribution

The occupation of a person refers to kind of work he actually does to earn a living and is not necessarily related to the type of industry in which he is employed. For example, a lawyer classified in the professional, technical, and kindred workers group might be employed by the government or by an insurance firm. In the first case, he would fall into the public administration industry group and in the second case, into the finance, insurance, and real estate category.

The occupational structure of an area reflects to a large degree the economic organization and the level of technological development. Table A-3 in the Appendix shows the numbers and per cent distribution of employed workers in each United States Census (1950) occupational category for the Peoria Area and other nearby standard metropolitan areas. The occupational distribution for Peoria is illustrated in Figure 3 on page 140.

An illuminating way of further grouping these data is combine them into broader classifications of non-agricultural as compared to agricultural workers. Agricultural workers include farmers and farm managers, farm laborers, and foremen. In the Peoria Area this group represented only about 5% of the total as compared to a national average of about 12%. This relatively small percentage in Peoria is reflective of a high level of industrialization and is a characteristic which this area has in common with the other standard metropolitan areas included in Table A-3.

The non-agricultural workers may be further sub-divided into white-collar and manual workers. The former group includes professional and semi-professional workers, proprietors, managers, and officials, except farm, sales people, clerical and kindred workers; the latter group is composed of craftsmen, foremen, and kindred workers; operatives and kindred workers, domestic service workers; service workers, except domestic; and laborers, except farm and mine.

The relative number engaged in white-collar occupations is a meaningful indication of the level of technological development. White-collar workers are a much more important segment in areas which have achieved a high level of technological advancement. The greater use of machines means a lesser need for manual workers; it means a higher real income and greater need for service workers. It also reflects the development of trade in the area. In view of this, it is not surprising that the Peoria Area white-collar workers represent 38% of the total employed in the area.

Professional,
Technical and
Kindred

Farmers and
Farm Managers

Managers,
Officials and
Proprietors,
except Farms

Clerical and
Kindred

Sales

Craftsmen, Fire-
men and Kindred

Operatives and
Kindred

Private Household

Service Workers
except Private
Household

Farm Laborers,
Unpaid Family
Workers

Farm Laborers,
except Unpaid &
Farm Foremen

Laborers except
Farm and Mine

Not Reported

Figure 3.
Percent Distribution
of Occupations in
Peoria, 1950

0 10 20 30 40 50 60 70 80 90 100

Approximately 55% of the total employed were engaged in manual labor, and while this is about 5% more than the national average, the gains in this group are mainly at the expense of the agricultural workers rather than the white-collar occupations. This preponderance of manual labor is a reflection of the industrial composition of the area and while this is considered in some detail below (page 141), it should be noted here that the physical goods industries and particularly manufacturers have a larger percentage of employment attachment than the physical state or the county. The importance of manufacturing is, no doubt, reflected in the percentage of manual laborers. These totals for the Peoria Area do not differ significantly with those of the other standard metropolitan areas with which comparison is made in Table A-3. The proportion of white-collar workers is high, the proportion of manual laborers is high, and the proportion of agricultural workers low, a composite which reflects a highly advanced state of industrial development.

The manual labor group is in itself a heterogeneous one and should be further broken down into skilled and unskilled workers. The occupations ordinarily considered as skilled are made up of the craftsmen, foremen, and kindred workers, and operatives and kindred workers. Table 4, page 142, shows the percentage distribution of the total employed which fall into these groups for the Peoria Area as compared with other nearby metropolitan areas, the State of Illinois, and the U. S. as a whole. As might be expected, the Rockford Area has the largest proportion of its employed in this group (47%) reflecting the concentration in that area of the tool and die industry, whereas Peoria, in addition to its industrial development, has a highly developed trade industry.

The proportion in the professional group in the Peoria area is virtually identical to that found in other areas and the U. S. as a whole. These figures are shown in Table 5, page 143. A detailed listing of employment by occupation can be found in the Appendix, Table A-4.

Industrial Composition

The production of a nation is usually thought of as being composed of physical goods and services. Of the twelve industrial classifications listed in Table A-5, in the Appendix, the following are considered as producing physical goods: agriculture, forestry and fishing; mining; construction; manufacturing. The remainder are thought of as principally being producers of services. On this basis the percentage distribution of employment for the Peoria Area, State of Illinois, and the U. S. as between the two as follows:

	<u>Peoria</u>	<u>Illinois</u>	<u>U. S.</u>
Physical goods industries	51%	45%	47%
Service Industries	49%	55%	53%

It is apparent that the Peoria Area has a higher proportionate concentration of industries engaged in the production of physical goods than either the U. S.

TABLE 4 - PER CENT OF PERSONS EMPLOYED IN CRAFTSMEN,
FOREMEN, AND KINDRED WORKERS, AND OPERATIVES IN KIN-
DRED WORKERS GROUPS - 1950

	<u>Per Cent</u>
Peoria Standard Metropolitan Area	38%
Davenport-Rock Island-Moline Standard Metropolitan Area	39
Rockford Standard Metropolitan Area	47
Evansville Standard Metropolitan Area	42
Illinois	36
U. S.	34

Source: Census of 1950

TABLE 5 - PER CENT OF PERSONS EMPLOYED IN PROFESSIONAL,
TECHNICAL, AND KINDRED WORKERS GROUP - 1950

	<u>Per Cent</u>
Peoria Standard Metropolitan Area	8%
Davenport-Rock Island-Moline Standard Metropolitan Area	9
Rockford Standard Metropolitan Area	8
Evansville Standard Metropolitan Area	8
Illinois	9
U. S.	9

Source: Census, 1950

or Illinois. A further breakdown of the figures is even more revealing. As indicated in Table A-5, and illustrated in Figure 4, page 145, employment attached to manufacturing industries for the Peoria Area is 38% of the total as compared to 26% and 32% for the U. S. and Illinois respectively.

Agricultural employment in this area represents only 6% compared to 13% and 7% for the U. S. and Illinois. The other two physical goods industries (mining and construction) are comparable in all three areas. Manufacturing employment in Peoria more than compensates for the smaller percentage of agricultural employment on a comparative basis, and hence, the percentage of physical goods employment in this area is comparatively larger than for the state and the country as a whole.

It is also of interest to note that the percentage of employment which is attached to wholesale and retail trade is about on par with the state and country. These data are additional evidence which indicate that the Peoria Area is one which is diversified, one which has more than its share of employees trained in manufacturing, and one which has a well-developed trade industry labor population.

A further breakdown of employment attachment by Industry is contained in Table A-6 in the Appendix. These data were available only for the 15th of May during the years 1949 to 1954. They indicate again the relative importance of the physical goods industries and particularly that of manufacturing. Of the industries included in the manufacturing category, it will be noted that non-electrical machinery had an employment attachment which represents on an average over the period well over 50%. This is due in large part, of course, to the importance of the earth-moving equipment enterprises in this area. The importance of the metals category is due to the existence in the area of a large steel plant.

EMPLOYMENT

Unfortunately data on employment and unemployment for the Peoria area are either not sufficiently available or are non-comparable historically for a complete picture of the degree of employment stability.

The data which are available (tables 6, 7, & 8; pages 146, 147, and 148 indicate, however, that the Peoria Area has been subject to the same recessionary forces which were felt throughout the economy during the end of 1953 and the beginning of 1954. This is particularly noticeable for May 15, 1954, when unemployment, as shown in Table 8, was greater than for any preceding year as far back as the data go -- May 15, 1945. This is also reflected in the employment figures of Tables 6 & 7. On the basis of Illinois State Department of Labor Figures, this represents an unemployment total of 6% of the Peoria Area labor force.

A further indication of the increase in unemployment in the area is the volume of unemployment compensation payments. The magnitude of these payments increases with the growth of covered unemployment and also varies directly with the duration of unemployment over each month. Table 9, page 150, lists

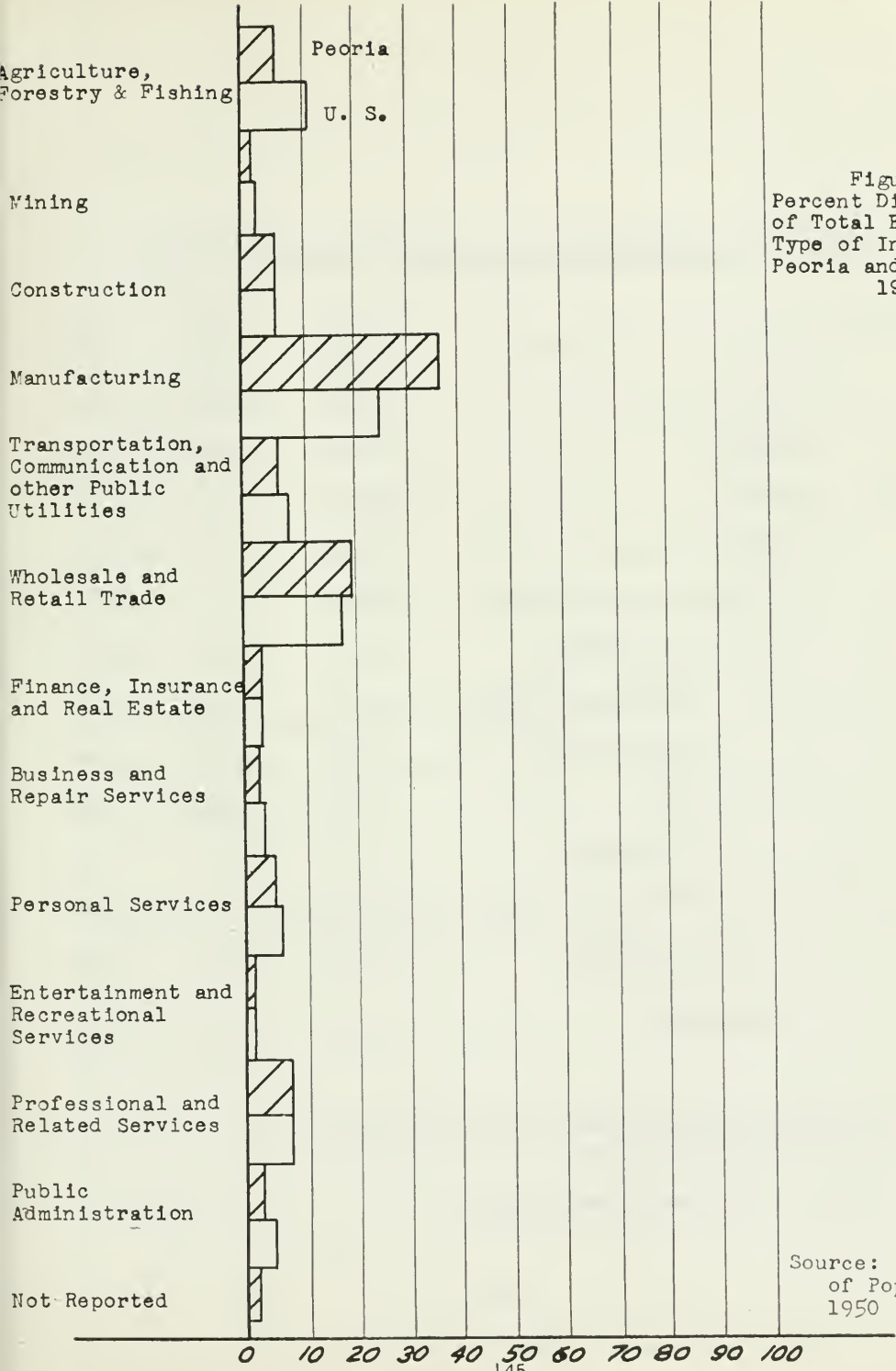


Figure 4.
Percent Distribution
of Total Employed by
Type of Industry for
Peoria and the U. S.
1950

Source: U.S. Cens
of Population,
1950

TABLE 6 - LABOR FORCE ESTIMATES* - PEORIA S. M. A.**

Item	May 1954	March 1954	May 1953
Total Civilian Labor Force	110,250	110,775	114,575
I. Unemployed	6,650	7,900	3,500
II. Employed	103,600	102,875	110,900
A. Non-Agricultural	97,800	97,175	105,000
1. Wage & Salary Workers	86,300	85,675	93,000
a. Manufacturing	39,600	39,125	45,625
Non-Electrical Mach.	23,700	23,700	29,400
Primary Metals	2,750	2,700	2,800
Food	7,050	6,800	7,450
All Other Mfg.	6,100	5,925	5,975
b. Non-Manufacturing	46,700	46,550	47,375
c. All Other Non-Agricultural	11,500	11,500	12,000
B. Agricultural	5,800	5,700	5,900

* Employment figures revised to May 1953 benchmark.

** Standard Metropolitan Area

Source: Illinois Department of Labor

TABLE 7 - NON-AGRICULTURAL EMPLOYMENT IN THE PEORIA
STANDARD METROPOLITAN AREA

	<u>Total</u>	<u>Manufacturing</u>	<u>Non-Manufacturing</u> ¹
1949 (May 15)	79,400	41,825	37,575
1950 "	83,275	44,650	38,625
1951 "	97,875 ²	47,850	50,025
1952 "	97,375	48,525	48,850
1953 "	97,275	46,525	48,750
1954 "	86,300 ³	39,600	46,700

¹ Does not include agricultural employment

² Benchmark revised to March 15, 1950

³ Revised benchmark

Source: U. S. Bureau of the Census
Illinois Department of Labor

TABLE 8 - UNEMPLOYMENT IN PEORIA AREA, BY SEX

	<u>Total</u>	<u>Female</u>
May 15, 1945 ¹	800	3
Nov 15 ¹	2,500	3
May 15, 1946 ¹	3,600	1,600
Nov 15 ¹	2,300	825
May 15, 1947 ¹	4,300	2,100
Nov 15 ¹	3,000	1,400
May 15, 1948 ¹	4,300	2,300
Nov 15 ¹	2,100	1,100
May 15, 1949 ²	5,700	1,700
Nov 15 ²	5,000	1,500
May 15, 1950 ²	5,000	1,900
Nov 15 ²	3,000	1,300
May 15, 1951 ²	2,700	2,000
Nov 15 ²	2,500	1,750
May 15, 1952 ²	3,275	1,050
Nov 15 ²	2,700	1,250
May 15, 1953 ²	3,500	1,575
Nov 15 ²	4,450	1,425
May 15, 1954 ²	6,650	2,350

¹Includes Marshall, Macon, Peoria, Tazewell & Woodford Counties

²Covers Peoria and Tazewell Counties only

³Information not available

Source: Illinois Department of Labor

the volume of these payments by month from January, 1950, to June, 1954. The data are particularly striking when comparisons are made for the same month on the year-to-year basis since variations within each year are also due to seasonal fluctuations.

The most significant increase occurred in December, 1953, and the payments remained relatively large until June of the current year, 1954. It is interesting to note that in common with the economy as a whole the volume of unemployment as reflected in compensation payments has been declining since the beginning of 1954. Whether this is the result of seasonal influences or more basic stabilizing forces is not discernable.

An analysis of seasonal variations in employment requires at least detailed information on employment by industry and by month. Unfortunately, these data are not available for the Peoria Area. While the figures on unemployment compensation payments are reflective of covered unemployment available on a monthly basis, they are not compiled by industry. They are further deficient in that they will not reflect seasonal employment changes unless there is a period of unemployment during the time a worker switches from one job to another and therefore applies for compensation. Finally, there may be payments to marginal workers who, in fact, should not be considered in the labor force. Students and housewives who entered the labor force and employment roles in answer to a seasonal demand are in some cases eligible for compensation after discharge, but have returned to school or the home with no intention of seeking employment. The totals for all covered employees by month do fluctuate in a fairly consistent way, but they are not a sufficient base for more than speculative and generalized conclusions.

Knowledge in general about seasonality is meager. It has been observed, of course, that the demand for labor and employment tends to increase at Christmas time, particularly in the retail trades; that as the seasonal supply of products increases and with it the need for employees to process them (as in harvesting, canning, etc.) there is a temporary increase in employment; that employment in industries specializing in goods, the demand for which is tied to the weather, increases seasonally (e.g., ice cream, beer, coal); that weather conditions affect such industries as construction. It has also been noted that a large source of the seasonal labor supply are people who are not permanently in the labor force and who, therefore, cannot be thought of as unemployed when the seasonal demand has abated.

These general observations apply as well as to the Peoria Area. Payments of unemployment compensation become noticeably lower from spring to summer and increase sharply from December to January. However, it should again be noted that the seasons of many industries are dove-tailed and the peaks and troughs probably are offset in the total figures of Table 9. Cyclical influence also tends to obscure the seasonal variations.

TABLE 9 - VALUE OF UNEMPLOYMENT COMPENSATION BENEFIT PAYMENTS FOR THE PEORIA AREA¹

--

	1949	1950	1951	1952	1953	1954
January	2	\$ 409, 005	\$ 177, 180	\$ 193, 895	\$ 283, 595	\$ 497, 205
February	2	312, 505	151, 260	192, 790	239, 705	468, 065
March	2	356, 625	130, 460	134, 515	228, 990	473, 285
April	2	235, 255	147, 770	130, 155	174, 025	360, 125
May	2	316, 160	199, 160	187, 955	172, 235	404, 230
June	2	334, 335	181, 370	185, 875	165, 015	379, 085
July	2	241, 185	175, 820	162, 255	153, 990	
August	2	213, 535	136, 685	315, 920	124, 145	
September	2	116, 180	151, 180	334, 625	93, 510	
October	2	109, 960	161, 920	142, 030	114, 200	
November	2	115, 670	90, 030	109, 810	160, 900	
December	\$ 197, 985	122, 550	96, 020	195, 170	360, 365	

¹ Consists of Peoria and Tazewell Counties² Information not available

Source: Illinois Department of Labor

COST OF LABOR

Wages

The cost of labor to an employer is not merely a matter of wage rates. Some of the important additional factors that must be considered are the productivity of labor, turnover, idle time due to work stoppages, the cost of fringe benefits such as pensions, vacations, etc.

Unfortunately the data on these elements are not complete, particularly for the purpose of comparisons between the Peoria Area and other industrial areas of similar size. The Bureau of Labor Statistics compiled figures on average hourly earnings of production workers in manufacturing for this area only during 1951 and 1952. These are presented in Table 10, page 152, although they do not present a complete cost picture of the labor cost of the firm despite the fact that, unlike wage rate data, these reflect overtime, part-time, bonuses, etc. Still they are a basic element. It will be noted that as of 1952 on the yearly average, hourly earnings in Peoria exceeded those of the state as a whole and the Rockford Area and were less than hourly earnings in the Davenport-Rock Island-Moline Area. The differences, however, were not substantial, and it may be concluded that earnings in the area of production workers in manufacturing are quite typical.

To provide a further picture of the wage rate structure in this area, the Division of Unemployment Compensation of the Illinois State Employment Service submitted information on rate ranges. Table 11, page 153, is a listing of some representative job titles and hourly rates. The job requirements of the titles listed do not vary widely among plants and industries but descriptions are available at any State Employment Service office should they be desired. It will be noted that no production type jobs have been included. Variations of job content among such jobs, even within a single industry, are so marked and the disparities among industries are so great that comparisons are not meaningful. The jobs which have been included in Table 11 were selected from those on which information was available which were deemed most useful for compatibility of rates among different areas.

Table 12, page 154, is a comparison of average hourly earnings in selected foundry occupations. An examination of the list shows that Peoria exceeds the other areas in some occupations and is below them in others. However, since there is no additional information on the amount of hours worked it is not possible to tell whether the differences are due to the differences in basic wage rates or time worked.

Additional data are available to some extent on wage rates, compiled by city rather than metropolitan area (Table 13, page 155). It can fairly be assumed, however, that these rates are uniform throughout each metropolitan area since they refer to occupations which are unionized. These figures are minimum

Table 10

HOURS AND GROSS EARNINGS OF PRODUCTION WORKERS IN
MANUFACTURING INDUSTRIES FOR THE STATE, PEORIA,
DAVENPORT-ROCK ISLAND-MOLINE, AND ROCKFORD
STANDARD METROPOLITAN AREAS

	Average Weekly Earnings	<u>Illinois</u>	
		Average Weekly Hours	Average Hourly Earnings
1951: Average	\$68.72	41.4	\$1.66
1952: Average	72.18	41.2	1.75
<u>Peoria</u>			
1951: Average	\$71.38	41.9	\$1.71
1952: Average	71.67	39.8	1.80
<u>Davenport-Rock Island-Moline</u>			
1951: Average	\$73.05	40.5	\$1.80
1952: Average	75.86	40.5	1.87
<u>Rockford</u>			
1951: Average	\$75.57	45.5	\$1.66
1952: Average	78.97	44.7	1.77

Source: U. S. Department of Labor

Table 11

JOB TITLES AND HOURLY RATES

Common Labor	\$0.75 - \$1.72
Hand Trucker	1.25 - 1.72
Truck Driver, Light	1.25 - 2.00
Truck Driver, Heavy	1.50 - 2.50
Welder	1.70 - 2.25
Tool and Die Maker	2.00 - 2.62 1/2
Millwright	1.71 - 2.71
File Clerk	0.72 1/2 - 1.67 1/2
Typist	0.72 1/2 - 1.60 1/2
Stenographer	0.87 - 1.71 1/2
Carpenter	1.50 - 2.36 1/2

Source: I.S.E.S., Division of Unemployment Compensation.

Table 12 - Average Hourly Earnings for Selected Foundry
Occupations in Specified Illinois Localities
January 1954

Occupation	Peoria Springfield Decatur	Moline-Rock Island- Davenport, Ia.	Rockford Beloit, Wis.
Wood Patternmaker	\$1.87	\$2.17	\$2.62
Metal Patternmaker	--	2.22	2.47
Floor Molder (does pouring)	1.82	2.07	1.72
Floor Molder (does not pour)	2.12	1.92	1.87
Bench Molder	1.87	1.67	--
Rollover Molder (pours)	--	1.87	--
Rollover Molder (does not pour)	--	--	1.87
Squeezer Molder (pours)	2.07	1.92	--
Squeezer Molder (does not pour)	1.82	--	--
Floor Coremaker	1.82	1.90	1.97
Bench Coremaker	1.87	1.77	1.97
Machine Coremaker	--	1.77	--
Electric Furnace Tender	--	--	2.35
Cupola Tender	1.72	1.82	--
Cupola Charger	1.76	1.75	1.47
Annealing Furnace Operator	--	1.45	--
Pourers (on conveyers)	--	1.47	1.77
Pourers (not on conveyers)	1.97	1.54	1.87
Shakeout Man	1.57	1.52	1.62
Blast Cleaner	1.42	1.57	1.87
Grinder	1.62	1.57	1.72
Chipper	1.62	1.57	1.72
Sand Cutter	1.67	1.69	1.62
Labor	1.47	1.47	1.37
Crane Operator	1.67	1.72	1.87
Welder-Defect Repair	--	1.72	--
Inspector	1.52	1.57	1.82
Maintenance Man	1.82	--	1.97
Electrician	--	1.99	--
Furnace Tender	1.67	1.74	1.62

Source: Illinois Department of Labor.

Table 13 - Union Wage Scales for Selected Building Trades
in the U. S., Peoria, Chicago, and Rockford
Rate Ranges, in the U. S.; July 1, 1954

	Brick- layers	Carpenters	Electri- cians	Painters	Plasterers	Plumbers	Building Laborers
U. S.	\$ 3.39	\$ 2.89	\$ 3.09	\$ 2.77	\$ 3.27	\$ 3.12	\$ 1.94
Peoria	3.35	2.96	3.10	2.62	3.29	3.10	2.27
Chicago	3.32	3.05	3.18	3.12	3.30	3.13	2.27
Rockford	3.10	2.80	3.00	2.65	3.00	3.00	2.13
U. S. Range	2.50- 3.80	2.10- 3.50	2.45- 3.50	1.75- 3.13	2.25- 3.75	2.50- 3.50	.90- 2.70

Source: United States Department of Labor.

union scales reported to the State Department of Labor for the purpose of providing prevailing wage data for application to government construction contracts in compliance with the requirements that the prevailing wage be paid on all government construction. These rates are the minimum agreed upon through collective bargaining, and exclude apprentices or premium rates, taking no account of overtime rates. The same table includes the range of rates in existence in the U. S., and it will be noted that rates in the City of Peoria are fairly typical of the national average and well within the extremes of the national range.

Tables A-8 through A-11 in the Appendix contain union scales for occupations in the building trades, printing trades, teamsters, and bakery trades.

From those data which are available it seems safe to conclude that while Peoria cannot be considered a low wage area, its rates and earnings are typical of locales in which there is a high degree of industrialization.

Productivity

Of great importance to any analysis of the labor force is the productivity of labor since wage payments taken by themselves are not completely indicative of labor cost. No data on productivity for this area have been kept by any government agency, and it was necessary to improvise an index with those figures which were available. Productivity measurements are not exact under the best of circumstances and a few words on the limitations of the method of estimation should be advanced.

Productivity refers to the relationship between output and man-hours worked. Given any wage rate the costs of production depend to a large extent upon the volume of output per man-hour. In a broader sense, the economic well-being of the country depends upon the amount of output that is achievable with a given amount of labor hours of work.

The basic method of computing changes in productivity involves:

1. The preparation of an index of production.
2. The preparation of an index of man-hours worked.
3. Dividing the index of production by the index of man-hours worked. The resulting ratio for the base year is equal to 100 and changes in the ratio are reflected in the percentage change over the base year. If production (the numerator) increases over time more than man-hours (the denominator), the ratio will be larger, indicating more output per man-hour. This higher ratio will be reflected as a percentage increase from the base year in the index of productivity.

In view of the paucity of data available for the Peoria Area, the following modifications in method were used:

1. An index of value added was prepared for manufacturing only, and for the years 1939 and 1947 only. It would be incorrect to use production figures instead of value added since the first includes value of products for which this area was not responsible. The true measure of output of this area is the value added to the product in the productive process which took place within this area exclusive of purchases of materials from without.
2. Since no data were available on actual man-hours worked during 1939 and 1947, the next best figures were number of employees. This assumes that the number of hours worked per employee was the same in both years. Insofar as this was not true, the index is distorted in favor of the year in which man-hours per employee was lower. (It is probably true that the average hours worked figure was considerably lower in 1939. Therefore, the productivity increase computed here is probably less than it actually was).

On the basis of these computations, it is estimated that in 1947 productivity increased by 47% since 1939. While this measure of productivity is revealing and useful, its limitations should be kept in mind. As explained by the Bureau of Labor Statistics, "Output per man-hour is a measure of the relationship between the volume of goods or services produced and one factor of input-labor time. The indexes do not measure the specific contribution of labor, capital, or any other single factor of production.

The output per man-hour and unit man-hour series also do not reflect increased efficiency or lowered costs resulting from such long-time trends as more economical use of fuel and materials or more efficient integration between industries. Changes in the ratio between output and man-hours of work show the joint effect of a large number of separate, though interrelated, influences. The long-term upward trend in output per man-hour is due mainly to technical improvements in industrial organization and processes. At any time, however, output per man-hour also depends on such factors as the rate of operations, the degree of capacity utilization, the relative contributions to production by plants at different levels of efficiency, the types of resources and materials available, the age and condition of machinery, type of production method, changes in product design and work methods, efficiency of management and labor, and state of industrial relations."¹

Hence, though it is impossible to assign specific values to the contributions of all of these interrelated factors which are reflected in productivity changes, this does not detract from the remarkable advance made in this area -- an advance that could have been thwarted by an inefficient, irresponsible labor force.

¹ United States Department of Labor, Bureau of Labor Statistics; Handbook of Labor Statistics, page 166.

Turnover

An additional factor which can be a source of inconvenience and cost to an employer is the rate of labor turnover. Table 14 on page 159 represents such data that are available for the Peoria Area, the United States, the Davenport-Rock Island Area, and the Rockford Area. These figures are averages for the month of April, 1949, and 1950, and are not extreme in any area. Tables A-13 through A-16 provide these figures by manufacturing industry and non-manufacturing industry for each of the metropolitan areas.

The turnover rates are grouped into two broad types of personnel action -- accessions and separations. The latter group may be the result of lay-off, discharge, suspension, quitting, etc. The rate for each type of action is computed by dividing the total number of accessions and separations in the month by the total number of employees who worked during, or received pay for, any part of the pay period ending nearest the 15th of that month. The result is then multiplied by 100 and this gives the accession and separation rate.

Turnover is costly for many reasons. It may mean that jobs are unfilled for certain periods of time; training of new employees is costly and the productivity of inexperienced help is relatively low; it is often reflective of poor morale and an inefficient enterprise; it necessitates an inordinately large personnel staff. In many cases high turnover rates are unavoidable; for example, when due to seasonality which cannot be modified or to haphazard fluctuations in demand for a product which are beyond the control of an enterprise. Turnover can be modified by the employer in many cases by instituting methods to regularize production.

To what extent the turnover rates of the Peoria Area are a reflection of each of these factors, is, of course, not discernable. However, these rates compared to those of similar areas and to the United States as a whole do not reflect any serious problem and on the basis of this evidence as well as observation, it may be concluded that the labor force in the Peoria Area is a stable one, characterized by a high degree of permanence of attachment.

TABLE 14 - LABOR TURNOVER RATES AT REPORTING FIRMS,
FOR PEORIA, DAVENPORT-ROCK ISLAND-MOLINE,
AND ROCKFORD STANDARD METROPOLITAN AREAS:
APRIL 1949, 1950

	April 1949		April 1950	
	<u>Accessions</u>	<u>Separations</u>	<u>Accessions</u>	<u>Separations</u>
Manufacturing				
Peoria S. M. A.	3.3	2.9	.4	.4
Davenport, RI, Moline S. M. A.	3.2 ¹	3.9 ¹	3.4 ²	3.7 ²
Rockford S. M. A. ³	2.0	3.8	n.a.	n.a.
U. S.	2.9	4.8	3.5	2.8
Non-Manufacturing				
Peoria S. M. A.	4.8	5.4	.4	.4
Davenport, RI, Moline S. M. A.	3.6 ¹	3.7 ¹	3.6 ²	3.0 ²
Rockford S. M. A.	2.7	3.6	n.a.	n.a.

¹Includes Mercer and Rock Island Counties, Illinois only

²Covers Rock Island County only

³This area includes all of Winnebago County

⁴Averages not available. See Table for turnover figures
by industry.

Source: Illinois Department of Labor
U. S. Bureau of Labor Statistics

UNIONIZATION AND INDUSTRIAL RELATIONS

The Peoria Area is unquestionably highly unionized. This portion of the report will deal with the extent of unionization in the area, the record of industrial relations and the prevailing fringe benefits which employers have granted through collective bargaining.

The existence of a highly developed union movement should not be considered a bar to industrial development. On the contrary, under the circumstances as they exist in the Peoria Area, unionization offers many advantages. All evidence indicates that union leadership and rank and file in the area are characterized by an attitude of responsibility, of awareness not only of the conflicts but the mutuality of interests. Perceptive management has recognized that unions are a permanent institution and that attempts to flee to non-union areas are in the long run more costly than locating in a locale where unions are already established and responsible. The experience of firms which have located in the south provide ample evidence of this. It is not long before they must meet attempts at organization and incur all the cost attendant upon this early phase of collective bargaining.

A description of the extent of unionization can only be based on estimates. Membership figures, even when made available by unions, are for many reasons inaccurate. The following data were compiled from figures painstakingly gathered by Dr. Daniel Scheinman, a labor relations consultant in this area, and are contained in an unpublished paper which he kindly made available. The figures were checked with independent estimates by local union leaders and the variations are only slight. It should be kept in mind, however, that due to the absence of actual records of union membership and the volatile nature of union attachment the figures cannot be taken as precise.

Of a total labor force in the Peoria Area of approximately 110,000, about 50% are union members. This total of about 55,000 is roughly divided among the American Federation of Labor, Congress of Industrial Organization, and Independent Unions as follows:

AFL	-	57%
CIO	-	32%
IND.	-	11%

As compared to the nation as a whole, in which it is estimated that union affiliation is about 27%, this area stands out as having well more than its share of union membership. This is not surprising, of course, in view of the high concentration of industry in the Peoria Area and the comparatively low amount of non-organizable labor.

A little more than half of the total union membership in the area are engaged in manufacturing. However, this represents 75% of employees engaged in manufacturing. Of the remaining union members, almost all are in the build-

ing trades, with no other single industry accounting for a large number. The construction industry, as might be expected, is completely unionized. Table A-17, Appendix, contains a list of the AFL, CIO, and Independent locals in the area and, while employee affiliation to these unions varies from 100% to practically zero in some cases, it should prove helpful in noting which industrial areas and crafts are organized.

Concerning the structure of the union movement in the area, it is typical of that which exists in other communities. The CIO locals are affiliated with their Internationals and through them with the national body. The AFL relationship is somewhat more complex and therefore the organization has been sketched out in Figure 5, on page 162.

An indication of the responsibility of union leadership is the degree to which they are civic-minded and the extent to which the community has accepted them in positions of public endeavor. An enumeration of the programs in which union leadership in this area has participated would cover almost every area of community activity. They are represented on the Community Chest Board, the Boards of many of the Chest affiliates, on several Mayor's committees, etc. They have been asked to join not as a gesture, but because of the prestige they have earned as individuals and as a group concerned with the well-being of the community of which they feel they are a part.

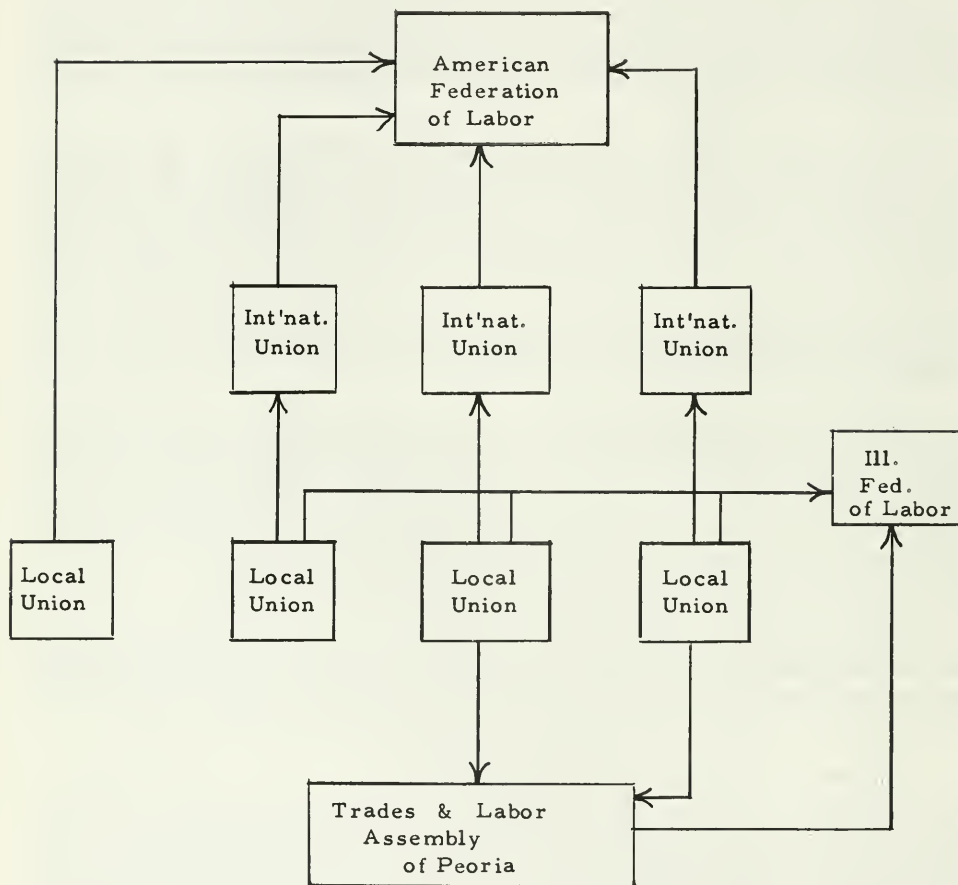
Because of the paucity of data on the types and extent of working conditions that exist in organized industry, a survey was undertaken in which employers were asked to submit information on this subject. The questionnaire was limited to manufacturing since the per cent of unionization of non-manufacturing industries in the area is small, with the exception of construction and information on the building trades which was available from other sources. A sample copy of the form used, Table A-24, can be found in the Appendix.

The co-operation of employers was good, the returns providing a sample which covered about 33% of the manufacturing firms in the area. However these firms accounted for about 75% of all employees in manufacturing. The replies confirm other estimates of the degree of unionization in manufacturing.

The results indicate that about 70% of production workers in manufacturing are members of unions. The percentage of non-production workers is much lower. About three out of four firms with a union have a union shop security clause -- new employees must join the union within a specified time after hire, usually 30 days. About half the unionized firms covered deduct union dues from the employee's paycheck. Seniority is the prevailing criterion in lay-offs and re-hiring. About nine out of every ten firms use seniority for lay-offs, and about eight out of ten use it for rehiring. Seniority prevails in approximately three out of four unionized firms with respect to transfer and promotion.

About 34% of the unionized firms contribute to pensions, and over 90% provide vacations with pay, the amount usually varying with length of service.

Figure 5
Organizational Structure of
American Federation of Labor Affiliates
in the Peoria Area



Almost eight out of ten firms have an established grievance procedure with the union which ends with voluntary arbitration. A negligible number (less than 2%) have a form of guaranteed annual wage.

Automatic cost-of-living adjustments are provided in about 10% of the unionized firms replying and in about 4%, changes in cost of living enables re-opening and renegotiation. Severance pay is provided by over 20% of the firms, but in many cases this is done unilaterally by the company.

The questionnaire asked each respondent to indicate whether, in their opinion, their labor relations should be characterized as excellent, good, fair, poor, or very bad. The replies were as follows:

1. Excellent - 40%
2. Good - 49%
3. Fair - 9%
4. Poor - 2%
5. Very bad - 0%

Undoubtedly some respondents tended to be generous in their appraisal, but even if some discounting of these replies is made, the responses indicate good relations on the whole. It is highly questionable that magnanimous respondents would reply "excellent" of their relations if they were only fair or poor -- yet 40% indicated that they belong in the highest category and a total of no less than 89% are in the "good" and "excellent" groups together.

There is further, and more objective, evidence of these good relations. Table 15 on page 164 is a comparison of the work stoppage record of the Peoria Area with the United States, Illinois, and nearby standard metropolitan areas for 1953. The data available did not permit a computation of the percentage of man-days idle, but even the figures which do exist reflect an excellent record in Peoria. It should be noted that Peoria, with a larger employed labor force, had less man-days idle than any of the other metropolitan areas.

The only other data available on this subject appear in Table 16, page 165. It is the work stoppage record of the City of Peoria from 1937 to 1952 and also bears evidence that work stoppages are not a problem in this area.

TABLE 15 - WORK STOPPAGES IN U. S., ILLINOIS, PEORIA, AND SELECTED STANDARD METROPOLITAN AREAS - 1953

	<u>U. S.</u>	<u>Illinois</u>	<u>Peoria</u>	<u>D-Rl-M.</u>	<u>Rockford</u>	<u>Evansville</u>
Number of Work Stoppages*	5,091	316	10	5	11	15
Workers Involved	2,400,000	98,200	1,980	4,280	1,900	13,300
Man-days idle during 1953	28,300,000	14,300,000	24,400	147,000	28,700	67,800

* Beginning in 1953

Source: U. S. Department of Labor, Bureau of Labor Statistics, Annual Reports on Analysis of Work Stoppages

TABLE 16 - WORK STOPPAGES IN PEORIA, 1937 - 1952

	Work stoppages beginning in year		Man-days idle during year
	Number of stoppages	Workers involved	
1952 ¹	11	2, 660	19, 200
1951 ²			
1950	11	5, 810	40, 500
1949	9	3, 530	64, 800
1948 ²			
1947	11	1, 700	89, 800
1946	11	4, 120	186, 000
1945	12	2, 700	56, 200
1944 ²			
1943	6	1, 327	13, 105
1942	11	1, 901	10, 224
1941	8	2, 520	19, 176
1940	5	1, 231	6, 923
1939	8	2, 430	35, 746
1938	4	119	1, 201
1937	17	4, 768	67, 862

¹Data for years 1952 refers to Peoria and Tazewell Counties. Data for prior years refer to the city of Peoria only.

²Data not shown, as evidently there were less than 10 work stoppages

Source: U. S. Department of Labor, Bureau of Labor Statistics,
Annual Reports on Analysis of Work Stoppages.

THE LEGAL FRAMEWORK OF THE PEORIA LABOR MARKET

No characterization of a labor market is complete without some treatment of the legal framework within which the sale and utilization of the labor service takes place. Legislation at the present time extends to practically every area of contact between employees, unions and management. The duties and responsibilities of the parties are in many areas specifically spelled out, in others regulation takes a more general form. This report is not concerned with an evaluation of existing legislation. The scope of this analysis extends merely to a description of the law as a necessary part of a complete picture of the labor market.

No attempt will be made in this section to enumerate the federal legislation as it applies to the Peoria Standard Metropolitan Area. While most people are more conscious of federal regulation of labor relations and working conditions, the pervasiveness of state and local controls is not fully appreciated. There is an increasing tendency on the part of the federal government to curtail its jurisdiction with the result that state law is becoming even more widely applicable. The state law, also, is much more detailed in form -- being more local in origin it is more specific in content. Another point that is not often appreciated is that in many instances federal law does not always take automatic precedence over local law. In many cases, when the state law sets a higher standard or a more restrictive control, it prevails over the federal law. This is made explicit, for example, in the Federal Fair Labor Standards Act and in the Labor Management Relations Act (Taft-Hartley Law).

Since the federal law is more widely known and since industry must concern itself more specifically with an entire layer of important and less known local law as it applies to their locus of operations, this section will concern itself mainly with summarizing the local law of the Peoria Area. Of course, it should be kept in mind that the purpose of the following is merely to give an idea of the legal framework of the labor market in which industry must operate. It is not intended as a complete guide and therefore, is not exhaustive and accurate for particular situations.

The state law is derived from the state constitution, the statutes, court decision, and rulings of the administrative agencies. No mere digest of the statutes can give a true picture of the legal proscriptions and an analysis of law emanating from the other sources is manifestly impossible.

It should be mentioned also that the Peoria Area is further governed by laws which have their source in the counties and ordinances passed by the cities. However, these regulations refer in the main to health and safety matters, generally, rather than to conditions surrounding the purchase and use of the labor service; and are, therefore, covered in Chapter 15 along with a discussion of other laws affecting business.

The State of Illinois has passed approximately 43 statutes which might be

classed as labor laws. The State Department of Labor has categorized these into six groups, as follows:

- A. Payment of Wages
- B. Hours of Labor
- C. Health and Safety
- D. Protection of Women, Minors, and Special Groups
- E. Employment
- F. Labor Relations

Illinois, unlike many states, does not have a formal labor relations act and as might be expected, curbs on both unions and industry are less stringent. However, the industrial record in the state and the Peoria Area, particularly in view of their high level of industrial development and unionization, compares most favorably with other areas which are more restrictive. It is difficult to determine whether the paucity of restrictions is the cause or result of the good labor relations, although the relationship probably holds both ways. It is evident, however, that the state government's attitude has been to absent itself in the main from this area and allow responsible unions and management to work out their own problems in a manner best suited to their particular circumstances.

The text which follows contains a summary of the most important provisions of the statutes, the enforcing and administering agency, and the penalties provided. They are presented by category as listed above.

A. LAWS RELATING TO PAYMENT OF WAGES

1. Wage payments in cases of discharge, lay-off quitting, strike, absence.

Coverage and Application

- a. All employers (except the employees of the State or any political subdivision thereof or any municipal corporation or body politic) are required in case of:
- (1) Discharge or lay-off: to make payment in full no later than 5 days after discharge or lay-off.
 - (2) Quit: to make payment no later than next payday if no notice of quit is given; or at time of quit if days (5) notice is given.
 - (3) Strike: to make payment at next regular payday if at least 5 days intervene.

Enforcing Agency & Administration

- a. Department of Labor
- b. Enforced through Wage Claims Unit, consisting of hearing officers, involving investigation of complaints, calling in parties involved in claims to hearings, adjustment or disposal of claims, or referral to the Attorney General.

Penalties

- a. \$25-\$200 for wilful refusal.
- b. Regular pay of worker continues but not beyond 10 days.

2. Semi-monthly payment of wages.

Coverage and Application

- a. Every corporation for profit must pay wages of employees at least semi-monthly with an allowable 13-day lag.
- b. Payment may be made within 10 extra days of time otherwise required if office from which payment is made is out of the State.
- c. Time and place of payment must be conspicuously posted.

Enforcing Agency & Administration

- a. Civil action to recover wages

Penalties

- a. \$25-\$200 for each offense.

- 3. Wages are due in full on payday

Coverage and Application

- a. Wages earned by employees cannot be withheld beyond regular payday.

Enforcing Agency & Administration*

Penalties

- a. Forfeiture of \$200 at suit of State, or any person.

- 4. Wages of workers employed under contract for public works.

Coverage and Application

- a. Regulates wages of laborers, mechanics and other workmen employed under contracts for public works, defined as including certain types of construction or repair work for public agencies. Such wages are not to be less than the general prevailing rate for work of a similar character in the locality in which the work is performed with the public body awarding contracts required to specify the prevailing wage.

Enforcing Agency & Administration

- a. Department of Labor to enforce and institute actions for penalties.

Penalties

- a. \$500 maximum, 6 months imprisonment maximum, or both.

- b. Wages due where private action taken.

- 5. Cash payments in lieu of payroll deductions for payments to medical service plan and non-profit hospital service plan corporation:

*Those laws which are penal in nature are enforced by the local State's Attorney in each county. Where a private remedy is granted, this remedy must be pursued by the person injured through the local civil courts.

Coverage and Application

- a. Whenever an employee agrees to let his employer make deductions from his wages for payments to an approved medical service plan or non-profit hospital service plan, the employer shall accept cash in lieu of such payroll deductions, for any period up to 6 consecutive months when such employee is unable to earn sufficient wages to cover the amount while employee does not accept any employment elsewhere.

Enforcing Agency & Administration*

Penalties

- a. \$100-\$500 for each violation

6. Deductions from wages.

Coverage and Application

- a. For gratuities as a result of coercion is prohibited.
- b. For insurance, hospitalization, etc. on voluntary basis is allowed.
- c. For medical examination is prohibited.
- d. Where collective bargaining agreement fixes wages, it is unlawful to obtain a refund (kickback) of any part of such wages to employer

Enforcing Agency & Administration*

Penalties

- a. \$100-\$300 fine for each employee involved.

7. Payment in Lawful Money.

Coverage and Application

- a. All employers must pay wages in money or by means redeemable in lawful money.

Enforcing Agency & Administration

- a. Civil action to recover wages.

*Ibid

Penalties

- a. \$100 fine or 30 days in county jail, or both.

8. Bond guaranteeing wages.

Coverage and Application

- a. Employers engaged in mining, quarrying, manufacturing and certain other occupations, having a lease only in the mine, plant, etc., are required to post with the State a bond in the amount of double the weekly or semi-monthly payroll, whichever is the payroll basis.

Enforcing Agency & Administration

- a. Civil action to recover wages.

Penalties

- a. \$100-\$500 fine.

9. Wage Assignment

Coverage and Application

- a. Is invalid without signature of assigner.
- b. Assignment of wages in excess of 25% is invalid.
- c. Benefits received under Unemployment Compensation are not assignable.

Enforcing Agency & Administration

Penalties

- a. \$50-\$200 fine serving wage demand wrongfully.

10. Garnishment.

Coverage and Application

- a. Sets up provisions whereby property of judgment debtor in hands of another may be taken by creditor.
- b. Salary in excess of \$30 of employee who is head of a family may be taken.

*Ibid

- c. Wages or salaries earned out of the State and payable out of this State are exempt from attachment or garnishment in all cases where the cause of action arose out of this State unless the principal defendant is personally served with summons.

Enforcing Agency & Administration*

Penalties

- a. \$500 and costs
- b. Cost of garnishment proceedings to be paid by plaintiff, or by garnishee, or apportioned.
- c. No penal act. A fine for unlawful garnishment for every offense not to exceed \$100 and costs.

11. Trust for employees.

Coverage and Application

- a. Employee benefit trusts are validated.

Enforcing Agency & Administration*

Penalties

- a. No penal act

*Ibid

B. LAWS RELATING TO HOURS OF LABOR

1. Six day week law (one day rest in seven).

Coverage and Application

- a. At least 24 consecutive hours of rest in every calendar week required in addition to the regular period of rest allowed at the close of each working day, together with certain requirements for posting Sunday schedules and keeping time books .
- b. Applies to employees of: "Every employer operating any factory" (including mill, workshop, or building or place for manufacture and repairing, altering, finishing, refining, bottling, canning, cleaning, laundering, etc.), "mercantile establishment, transportation or public service company, hotel, or apartment hotel, restaurant, hospital, laundry, telegraph or telephone establishment, banking institution, brokerage business, theater or freight or passenger elevator in this State, or any employer engaged as a contractor to furnish or supply labor upon a contract to any person, municipality or county institution of this State, or any office thereof. . ."
- c. Exemptions: Janitors, watchmen, superintendents, foremen, employees whose duties on Sunday do not consume more than 3 hours such as employees engaged in (a) setting sponges in bakeries, (b) caring for live animals, (c) maintaining fires or electrical current (d) necessary repairs to boilers, machinery, equipment or power.

Enforcing Agency & Administration:

- a. Director of Labor
- b. Administered by Division of Women's and Children's Employment.
- c. Involves examination of employee's time records, checking the posting of Sunday schedule and filing of same with the Department of Labor, and investigating complaints.

Penalties:

- a. \$25-100 for each offense or violation of any provision.

2. Eight hour day for women.

Coverage and Application:

- a. Prohibits employment of women for more than 8 hours during any one day or more than 48 hours in any one week.
- b. Applies to all female employees in any mechanical, mercantile establishment, factory, laundry, hotel, and restaurant, barber or beauty shop, telephone and telegraph establishment or office thereof, place of amusement, express, transportation or public utility businesses, common carrier, and public and private institutions or offices thereof.
- c. Exceptions: Graduate nurses; telephone operators under certain conditions; certain employees in public emergencies limited to 48 hours; 9 hours one day a week for non-mercantile employees if deducted from subsequent regular schedule; and for mercantile employees 9 hours a day not to exceed 54 hours a week for 4 weeks a year.

Enforcing Agency & Administration:

- a. Department of Labor
- b. Administered by the Division of Women's and Children's employment.
- c. Involves examination of employee's time records, and investigating complaints.

Penalties:

- a. \$25-\$100 for each offense, also \$25 for failure to keep records or false statements.

3. Hours of Labor

Coverage and Application:

- a. A legal day's work is defined as eight hours.

Enforcing Agency & Administration:*

Penalties:

- a. Not a penal act.

C. LAWS RELATING TO HEALTH AND SAFETY

1. Factory Inspection Act

Coverage and Application

- a. All factories, mercantile establishments, mills, workshops, and commercial establishments where goods are manufactured, stored, or sold at wholesale or retail are required to be inspected.
- b. This law reinforces the authority of other laws such as: the Health and Safety Act, Washrooms in Certain Employments, Sanitary Standards for Butterine and Ice Cream Factories, Structural Work Law, Eight Hour Day and Six Day Week Laws, and Work under Compressed Air Act.

Enforcing Agency & Administration

- a. Requires the Department of Labor to visit and inspect all such enumerated establishments and enforce all laws relating to inspections and make special investigations into conditions of labor and abuses therewith. The State to be divided into districts with regard to number of establishments and amount of work to be performed in each district.
- b. State's Attorney shall prosecute any violation upon request of the Department of Labor.

Penalties:

- a. None specifically provided, except prosecution for violation.

2. Health and Safety Act

Coverage and Application

- a. Requires all employers to provide reasonable protection to the lives, health and safety of all persons employed and provides for the making, promulgation, and publication of reasonable rules relating to specified situations.
- b. Applies to all employers engaged in any occupation, business, or enterprise, except those engaged in farming, tillage of soil, stock raising, and those who rent, lease, or demise land for such purposes, and work done on a farm or country place.

Enforcing Agency & Administration

- a. Industrial Commission vested with rule-making authority involving technical study of health and safety hazards and setting detailed standards. Eleven rules, Parts A through K, issued through July 1, 1953.
- b. Enforcement of Health and Safety Rules placed in Department of Labor, the Division of Factory Inspection acts as duly authorized agent of the Department of Labor in making detailed physical examination of premises to determine compliance with rules and regulations contained in Parts A through K.

Penalties

- a. \$25-\$199 for first offense.
- b. \$50-\$200 for subsequent offenses.

4. Structural Work Law

Coverage and Application

- a. Any person, firm, or corporation erecting or constructing scaffolds, hoists, cranes, step ladders, supports, and other mechanical contrivances for use in erecting, repairing, altering, etc., any house, building, bridge, or other structure must meet certain safety requirements.

Enforcing Agency & Administration

- a. Director of Labor and local authorities.
- b. Physical inspections of construction sites are made by the Division of Factory Inspection.

Penalties

- a. \$25-\$200 for certain violations by architects and draftsmen.
- b. \$25-\$500, 3 months -- 2 years imprisonment, or both for general violations.
- c. Reasonable fees for attorneys forced to start private proceedings.
- d. Possible right of action for direct damages.

5. Washrooms in Certain Employments.

Coverage and Application

- a. Every owner or operator of a coal mine, steel mill, foundry, machine shop, railroad, or like business with such exposures to dust, smoke, grime, is required to provide and maintain a suitable and sanitary washroom.

Enforcing Agency & Administration

- a. Department of Labor; Mine inspectors; other inspectors.
- b. The Division of Factory Inspection inspects places other than mines.

Penalties

- a. \$ 200 maximum for first offense.

6. Sanitary Standards for Butterine and Ice Cream Factories

Coverage and Application

- a. Requires that certain sanitary structural plumbing and ventilating standard be maintained in butterine and ice cream factories.

Enforcing Agency & Administration

- a. Department of Labor required to inspect and to issue certificates of compliance.
- b. Enforced and administered by the Division of Factory Inspection.

Penalties

- a. \$ 50-\$ 200 for first offense.
- b. \$ 500 maximum, 30 days imprisonment, or both for second offense.
- c. \$ 500 minimum, 60 days imprisonment, or both for third offense.

7. Workmen's Compensation Act

Coverage and Application

- a. Provides for the payment of specified amounts of compensation to employees injured in the course of employment, and requires covered employers to furnish financial guarantees when self-insured or to insure his liability in some authorized insurance carrier. Also provides for adjudication of contested claims.
- b. All defined "extra-hazardous" industries and State and local governments are compulsorily covered. All other employers may elect to come under the Act. Employers not electing barred from certain common law defenses.
- c. Weekly Benefit Rates -- Effective July 1, 1953:

	% Average weekly earnings	Minimum	Maximum
No children . . . . .	.75%	\$ 14.25 . . . . .	.\$ 29.00
1 child . . . . .	.82-1/2%	20.90	29.00
2 children . . . . .	.90%	22.80	30.40
3 children . . . . .	.97-1/2%	24.70	34.20
4 or more children . . . . .	.97-1/2%	26.60	38.00

Death Benefits -- Effective July 1, 1953:

No children	\$ 4,750 . . . . .	.\$ 8,000
1 child	5,700	8,500
2 children	5,890	9,250
3 children	6,080	10,250
4 or more children	6,080	10,750

Enforcing Agency & Administration

- a. Administered by the Industrial Commission which adjudicates claims, holds formal hearings, approves contract and lump sum settlements, and has a large number of ancillary duties.

Penalties

- a. \$ 100-\$500 for failure to file statement of financial ability or to insure payment, each day of refusal or neglect being a separate offense.
- b. 50% increase in compensation for vexation delays in paying compensation.

- c. \$10-\$500 for general violation

8. Workmen's Occupational Diseases Act

Coverage and Application

- a. Provides for the payment of specified amounts of compensation to employees sustaining an occupational disease in the course of employment and requires covered employer electing coverage to furnish financial guarantees when self-insured or to insure his liability in some authorized insurance carrier. Also provides adjudication of contested claims.
- b. All employers may elect to come under the Act.
- c. Employers not electing barred from certain common law defenses.

Enforcing Agency & Administration

- a. Administered by the Industrial Commission which adjudicated contested claims, holds formal hearings, approves contracts and lump sum settlements, and has a large number of ancillary duties.

Penalties

- a. \$100-\$500 for failure to file statement of financial ability or to insure payments, with each day of refusal or neglect being a separate offense.
- b. \$10-\$500 for general violation.

9. Compulsory Coverage of Rejected Employers

Coverage and Application

- a. Provides insurance for employers rejected for insurance covered under the Workmen's Compensation and Occupational Diseases Acts by assignment, and provides for the pooling of losses.

Enforcing Agency & Administration

- a. Industrial Commission must assign rejected employer to carrier; and administer the act.
- b. Director of Insurance to suspend license for refusal to comply.

Penalties

- a. Suspension of State Insurance license of carrier.

D. LAWS RELATING TO THE PROTECTION OF WOMEN, MINORS, AND SPECIAL GROUPS

1. Child Labor Law

Coverage and Application

- a. Applies to minors under 16 years
- b. During school hours, minimum employment age is 16, except for specific types of theatrical employment.
- c. Outside of school hours and during school vacations a minor, except one engaged in agricultural pursuits, sale and distribution of magazines, or newspapers or domestic service, must have an employment certificate and must be at least 14.
- d. No minor under 16 may be employed on hazardous work as defined by law.

Enforcing Agency & Administration

- a. Department of Labor
- b. Truant officers and school officials
- c. City or County Superintendents of Schools.
- d. Administered and enforced by the Division of Women's and Children's Employment, Requires (1) inspection of establishments generally and upon complaint; (2) checking on and supervising issuance of employment certificates; and (3) careful investigations of violations for prosecution evidence.

Penalties

- a. \$25-\$200, 60 days maximum imprisonment, or both.
- b. Each day and each minor a separate offense.

2. Minimum Wage Standards for Women and Minors

Coverage and Application

- a.. Applies to all occupations except domestic service and farm labor for which Wage Orders are issued.

- b. At present 5 Orders are effective:
 - (1) Directory Orders:
 - (a) Macaroni, Spaghetti, and Noodle Industry
 - (b) Wash Dress Industry
 - (c) Confectionery Industry
 - (2) Mandatory Orders:
 - (a) Laundry Occupations
 - (b) Beauty Culture Occupations

Enforcing Agency & Administration

- a. Department of Labor
- b. Administered by the Division of Women's and Children's Employment. Requires examination of books of establishments in the covered industries and investigation upon complaints. Also must make investigation of "oppressive and unreasonable wages" and hold hearings and prepare studies for issuance of new wage order or revisions of rates in existing orders.

Penalties

- a. \$50-\$200 for discrimination if employee testifies.
- b. \$50-\$200, 10-90 days imprisonment, or both, for violation of order, each week for each employee being a separate offense.
- c. \$25-\$100 for failure to keep records
- d. Private civil action to recover wages due under Order.

3. Industrial Home Work

Coverage and Application

- a. Employers of homeworkers required to secure a permit, except that no fee shall be required of any employer with respect to an industrial home worker who is physically handicapped.
- b. All homeworkers required to secure a certificate.
- c. Certain sanitary conditions must be fulfilled.
- d. Certain types of industrial homework prohibited.

Enforcing Agency & Administration

- a. Department of Labor
- b. Administered by the Division of Women's and Children's Employment including the collection of fees. Requires the inspection of premises where homework is to be performed for sanitation, ventilation, temperature, space, and health of worker in connection with issuance of permits and certificates.

Penalties

- a. \$10-\$500 each day a separate offense.
4. Preference to Citizens on Public Works Projects

Coverage and Application

- a. Preference for employment in the construction of public works projects given to citizens of the United States who have resided in Illinois for one year.
- b. Applies to hirers of labor on public works and contracts (State and local governments).

Enforcing Agency & Administration

- a. Department of Labor

Penalties

- a. \$100 maximum fine; 30 days maximum imprisonment. Each separate case a separate offense.
5. Discrimination in Employment Under War Defense Contracts

Coverage and Application

- a. All persons, firms, or corporations engaged on war defense contracts or subcontracts of State or Federal government, forbidden to discriminate on the basis of race or color.

Enforcing Agency & Administration

- a. Department of Labor; State's attorneys; Attorney General.

- b. The Department of Labor is to furnish copies of Act to war defense contractors for display and to receive verified complaints of discrimination, and together with State's attorneys and Attorney General to enforce prosecution of violations.

Penalties

- a. \$100-\$500 for violation of discrimination clauses.
 - b. \$25 for each day Act is not displayed.
 - c. Each day's violation is separate offense.
6. Equal Pay for Women

Coverage and Application

- a. Women engaged in manufacture who do identical work under identical conditions must receive pay equal to males.

Enforcing Agency & Administration*

Penalties

- a. \$25-\$100 fine (with 6 month statute of limitations).

7. Service Men's Employment Tenure Act

Coverage and Application

- a. Service men given right to return to employment they left on entering service.

Enforcing Agency & Administration*

Penalties

- a. Remedy consists of private action against employer for recovery of wages, benefits lost, and reasonable attorney fees.

8. Race Discrimination Prohibited on Public Works

Coverage and Application

- a. Prohibits discrimination in employment because of race or color in connection with public contracts.

Enforcing Agency & Administration*

*Ibid

Penalties

- a. \$100-\$500 fine, 30-90 days imprisonment, or both, for each offense.
- b. \$100-\$500 fine for violation or incitement to be collected by each aggrieved person from each person so fined.
- c. \$5 a day deducted from amount payable by public agency for each person discriminated.

9. Protection of Chauffeurs.

Coverage and Application

- a. Vehicles shall be equipped with an enclosure to protect drivers against wind, dust, and weather.

Enforcing Agency & Administration*

Penalties

- a. \$10-\$50 fine for each day and each automobile or truck used.

*Ibid.

E. LAW RELATING TO EMPLOYMENT

1. Employment Offices and Agencies Act

Coverage and Application

- a. Provides for co-operation between the State of Illinois and the Federal government.

Enforcing Agency & Administration

- a. Department of Labor

Penalties

2. Public Employment Offices and Agencies Law

Coverage and Application

- a. Authorizes the Department of Labor to establish and maintain free employment offices for persons seeking employment for persons seeking to employ labor.

Enforcing Agency & Administration

- a. Department of Labor
- b. Administered by the Illinois State Employment Service. (Federal Funds.)

Penalties

- a. \$25-\$50; 30 days maximum imprisonment for accepting fee or compensation.

3. Unemployment Compensation Act.

Coverage and Application

- a. Provides, as a matter of right, for partial replacement of wages lost by individuals unemployed because of lack of work opportunities.
- b. Such individuals must meet specific eligibility requirements and must have worked, in the recent past, for employers liable for the payment of contributions.

- c. In general, contributions are payable by employers of six or more workers except with the respect to agricultural labor, public employment, domestic services, work for certain non-profit institutions, and a number of other minor occupations.

Enforcing Agency & Administration

- a. Director of Labor
- b. Administered by the Division of Unemployment Compensation. (Federal Funds.)

Penalties

- a. \$5-\$200; 6 months maximum imprisonment, or both; each act, failure, neglect, or refusal, a separate and distinct offense.
 - b. Cancellation of benefit rights for fraud.
4. Medical Examination of Applicants for Employment.

Coverage and Application

- a. No employer shall require any employee or applicant for employment to pay the cost of a medical examination or the cost of furnishing any records of such examination required by the employer as a condition of employment.

Enforcing Agency & Administration*

Penalties

- a. Not more than \$100 fine for each offense.

5. Private Employment Agencies Act

Coverage and Application

- a. Regulates private employment agencies and sets conditions and fees for licenses for agencies and employment counselors.

Enforcing Agency & Administrators

- a. Department of Labor

*Ibid

- b. Administered by the Division of Private Employment agencies. Requires issuing licenses to placement agencies and employment counsellors; inspecting books; securing compliance in required practices; and processing of complaints.

Penalties

- a. Revocation of employment agency's license for failure to comply with required duties and provisions. Fine of \$50-\$200, or if fine not paid, imprisonment for a maximum of 6 months, or both, for having no license or failure to pay fee.
- b. Private action on bond.
- c. Fine of \$50-\$200, or imprisonment for 1-6 months, or both, for violation of employment counsellor licensing section.
- d. Fine of \$50-\$200, or maximum of 1 year imprisonment, or both, and revocation of license for Child Labor Law violations.
- e. \$25 maximum fine for other violations, or if fine not paid, 30 days maximum imprisonment.

F. LAWS RELATING TO LABOR RELATIONS

1. Controversies Between Employer and Employees

Coverage and Application

- a. In case of strike or lockout involving more than 25 employees:
 - (1) Mayor or village president must notify Department of Labor.
 - (2) Department of Labor required to investigate and attempt to effect a settlement.
- b. Application by employer or majority or employees where controversy exist may be made to Department of Labor for investigation.
 - (1) These cases handled by the Conciliation and Mediation Service.

Enforcing Agency & Administration

- a. Department of Labor is required to investigate employer-employee disputes and endeavor to effect settlement under certain circumstances.
- b. The Conciliation and Mediation Service handles these cases.

Penalties

- a. Contempt proceedings to enforce Department of Labor decisions used as the remedial method of enforcement.

2. Conditions and Provisions in Contracts of Employment

- a. Invalidates "yellow-dog" contracts.

Enforcing Agency & Administration*

Penalties

- a. Contracts covered by law are declared wholly void and unenforceable.

3. Advertisements for Employees During Strikes or Lockouts.

Coverage and Application

- a. Advertisements for employees must so state if a strike or lockout is in progress.

*Ibid.

Enforcing Agency & Administration*

Penalties

- a. \$ 100-\$ 300 fine for each day's advertising.

4. Extortion Relating to Workmen and Employers.

Coverage and Application

- a. Unlawful for anyone to extort money from employers by virtue or representing association of workmen.

Enforcing Agency & Administration*

Penalties

- a. Imprisonment in penitentiary from 1-5 years.

5. Issuance of Injunctions Prohibited in Labor Disputes.

Coverage and Application

Enforcing Agency & Administration

Penalties

*Ibid.



CHAPTER VIII
WATER SUPPLY



INTRODUCTION TO WATER SUPPLY

Several factors peculiar to the Peoria Metropolitan Area affect the water supply situation. The most controversial of these is increased diversion from Lake Michigan into the Illinois River. This is related to water supply; as many industries are using river water for condensing purposes and it is also being used as the source in infiltration pits attempting to replenish the ground water supply. For this reason this section contains reports on diversion, turbidity and temperature of river water, and the daily discharge of the Illinois River, in addition to topics more commonly associated with water supply, such as reports on water works, mineral quality of well waters, reports on water shortage, water hardness and Ph, and water use per unit of product.

The first part of this section deals with the Peoria Water Works and the Pekin Water Works; the second part goes into the water shortage problem; the third part reports on the Illinois River, diversion, turbidity, and discharge; and the last part contains a number of tables and charts pertaining to the main body of the report.

WATER SUPPLY

Source of Water, Peoria Metropolitan Area

Except for the relatively small amount of water taken from the river and from the deep rock wells, all of the municipal and industrial demands are supplied from wells penetrating sand and gravel deposits in terraces or in the flood plain of the river. As might be expected these wells vary in depth, diameter, and yield. The deeper wells are, of course, in the bluff areas, as in Peoria Heights, where wells 330 feet or more in depth have been constructed, while on the river flood plain and terraces wells as shallow as 35 feet are found. Production rates vary from 10 to nearly 3,000 g. p. m.

Source: Bulletin No. 33
Illinois State Water Survey

REPORT ON PEORIA WATER WORKS

The Peoria Water Works obtains water from 15 wells located as follows:

Sankoty - 7 wells 90-140 ft. deep
Washington St. - 4 wells 125 ft. deep
Lincoln and Griswold - 2 wells 165 ft. deep
Main Station - 2 wells 65 ft. deep

Total pumpage from these wells averages 16 million gallons per day. The temperature of the water at the well varies from 54° to 56° F., winter and summer.

There are at present no restrictions on the use of water. Formerly restrictions were in force on lawn sprinkling, car washing, etc.

A copy of the rates is enclosed in this section of the survey, also a map of the area served by the Peoria water works.

The company is privately owned and operated, being a part of the American Water Works Service Company.

Table 1

RATES and CONDITIONS of SERVICE by PEORIA WATER WORKS CO.

SCHEDULE OF WATER RATES

Applying to the following territory: Peoria, Bartonville,
and portions of Peoria County, Illinois

LOW PRESSURE SERVICE

Metered

Available for: Domestic, Commercial, Industrial, and Public Service in the Low Service District for Customers using the Company's water service exclusively.

Water Rates: For all water used in each month or quarter the following rates shall apply, but if the quantity registered should not equal the minimum charge, then the minimum charge shall apply:

LOW PRESSURE SERVICE (cont'd)

	Rate per Gross	100 Cu. Ft. Net
For the first 100 cu. ft. per mo. or 300 cu. ft. per quarter, or any part thereof.....	\$0.40	\$0.38
For the next 700 cu. ft. per mo. or 2,000 cu. ft. per quarter, or any part thereof.....	.25	.2375
For the next 2,400 cu. ft. per mo. or 7,200 cu. ft. per quarter, or any part thereof.....	.20	.19
For the next 130,100 cu. ft. per mo. or 390,300 cu. ft. per quarter, or any part thereof.....	.10	.095
For all over 133,300 cu. ft. per mo. or 399,900 cu. ft. per quarter, or any part thereof.....	.07	.0665

MINIMUM CHARGES

Size Meter	Per Month		Per Quarter	
	Gross	Net	Gross	Net
5/8 in. or smaller.....	\$ 0.35	\$ 0.33	\$ 1.05	\$ 0.99
3/4 in. ....	.75	.71	2.25	2.13
1 in.	1.00	.95	3.00	2.85
1½ in.	2.00	1.90	6.00	5.70
2 in.	4.00	3.80	12.00	11.40
3 in.	7.00	6.65	21.00	19.95
4 in.	12.00	11.40	36.00	34.20
6 in.	20.00	19.00	60.00	57.00
8 in.	35.00	33.25	105.00	99.75

HIGH PRESSURE SERVICE

Metered Service

Available for: Domestic, Commercial, Industrial, and Public Service in the High Service District for Customers using the Company's water service exclusively.

Water Rates: For all water used in each month or quarter, the following rates shall apply, but if the quantity registered should not equal the minimum charge, then the minimum charge shall apply.

	Rate per Gross	100 Cu. Ft. Net
For the first 100 cu. ft. per mo. or 300 cu. ft. per quarter, or any part thereof.....	\$0.40	\$0.38
For the next 700 cu. ft. per mo. or 2,100 cu. ft. per quarter, or any part thereof.....	.30	.285
For the next 2,400 cu. ft. per mo. or 7,200 cu. ft. per quarter, or any part thereof.....	.22	.209
For the next 130,100 cu. ft. per mo. or 390,300 cu. ft. per quarter, or any part thereof.....	.11	.1045

HIGH PRESSURE SERVICE (cont'd)

	Rate per Gross	100 Cu. Ft. Net
For all over 133,300 cu. ft. per mo. or 399,900 cu. ft. per quarter, or any part thereof.....	.08	.076

MINIMUM CHARGES

Size Meter	Per Month		Per Quarter	
	Gross	Net	Gross	Net
5/8 in. or smaller.....	\$ 0.35	\$ 9.33	\$ 1.05	\$ 0.99
3/4 in. ....	.75	.71	2.25	2.13
1 in.	1.00	.95	3.00	2.86
1½ in.	2.00	1.90	6.00	5.70
2 in.	4.00	3.80	12.00	11.40
3 in.	7.00	6.65	21.00	19.95
4 in.	12.00	11.40	36.00	34.20
6 in.	20.00	19.00	60.00	57.00

HIGH AND LOW SERVICE DISTRICTS

STANDBY METERED SERVICE

Available for: Domestic, Commercial, Industrial and Public Service in both the Low and High Service Districts for Customers using the Company's water service as an auxiliary or standby service.

WATER RATES

For all quantities used in each month or quarter the water rates for the district involved shall apply, but if the quantity registered should not equal the minimum charge, then the minimum charge shall apply.

MINIMUM CHARGE

Size Meter	Per Month		Per Quarter	
	Gross	Net	Gross	Net
5/8 in. or smaller.....	\$ 1.05	\$ 1.00	\$ 3.15	\$ 3.00
3/4 in.	2.25	2.14	6.75	6.42
1 in.	3.00	2.85	9.00	8.55
1½ in.	6.00	5.70	18.00	17.10
2 in.	12.00	11.40	36.00	34.20
3 in.	21.00	19.95	63.00	59.85
4 in.	36.00	34.20	108.00	102.60
6 in.	60.00	57.00	180.00	171.00
8 in.	105.00	99.75	315.00	299.25

SPECIAL TERMS AND CONDITIONS

The above rates shall be applied to all Customers having a private supply and using the Company's water service during emergencies or for a portion of their total requirements or on a part time basis.

ALL TERRITORY SERVED

FLAT RATE SERVICE

Fixture Rates: The fixture rates in the following table are annual rates, that may be collected one-fourth at the beginning of each quarter of the year.

DWELLING HOUSE RATES	Gross	Net
Dwelling occupied by one family, four rooms or less, including one kitchen sink	\$5.20	\$4.94
Each additional living room	1.30	1.23
One bath tub	3.90	3.70
Each additional tub	2.60	2.47
One water closet	3.90	3.70
Each additional water closet	1.95	1.85
One wash basin	1.95	1.85
Each additional wash basin	1.30	1.23
One laundry or slop sink	1.95	1.85
One set of laundry tubs	2.60	2.47
Each water power washing machine	5.20	4.94
Each water motor pump or water lift	6.50	5.67
Urinals	3.90	3.70

APARTMENT OR TENEMENT HOUSE RATES

Each family, four rooms or less, including one kitchen sink	5.20	4.94
Each additional room	1.30	1.23
Each bath tub	3.90	3.70
Each water closet	3.90	3.70
Each wash basin	1.95	1.85

Basement Fixtures for General Use

Each laundry or slop sink	1.95	1.85
Each set of laundry tubs	3.90	3.70
Each water power washing machine	5.20	to 4.94 to
	15.60	14.82

BOARDING HOUSE, LODGING HOUSE AND HOTEL RATES

Gross	Net
\$1.30	\$1.23
7.80	7.41
6.50	5.67
3.90	3.70
1.30	1.23
3.90	3.70
6.50	5.67

BUSINESS HOUSE RATES

Bakeries, daily average barrels of flour used per barrel	3.90		3.70
Banks, one faucet	7.80		7.41
Barber shop, first chair	3.90		3.70
Each additional chair	2.60		2.47
Bath tubs, public per tub	13.00		12.35
Beer depots (not including bottling)	13.00		12.35
Billiard and pool rooms, each	7.80		7.41
Blacksmith shops, first fire	4.55		4.32
Each additional fire	2.27		2.16
Blue printing establishments	19.50		18.52
Boarding schools, each room	1.30		1.23
Bottling works	52.00	to	49.40 to
	130.00		123.50
Butcher shops, each stall	3.90		3.70
Bowling Alleys, each	7.80		7.41
Cleaning, pressing, and dyeing establishments	15.60	to	14.82 to
	39.00		37.05
Club houses, each room	3.90		3.70
Coal or lumber office	7.80		7.41
Concrete block or column factory	15.60	to	14.82 to
	46.80		44.46
Confectionery or ice cream parlors, each	7.80	to	7.41 to
	39.00		37.05
Dentists' cuspidors, each	15.60		14.82
Drinking fountains, self-closing	7.80		7.41
Not self-closing	13.00	to	12.35 to
	26.00		24.70
Drug stores, one faucet	10.40	to	9.88 to
	15.60		14.82
Express offices, one wash basin	7.80		7.41
Each additional wash basin	3.90		3.70
Florists' display room, one faucet	15.60		14.82
Foundry	31.20	to	29.74 to
	78.00		74.10

Peoria Water Works Co., (cont'd) - Table 1

	Gross		Net
Hair dressing parlors, including one wash basin	\$ 7.80		\$ 7.41
Each additional wash basin	3.90		3.70
Lodge rooms including one sink, each	13.00		12.35
Meat or fish markets (retail)	10.40		9.88
Meat depots (wholesale)	15.60	to	14.82 to
	46.80		44.46
Milk depots, not including creameries	10.40	to	9.88 to
	46.80		44.46
Office, with wash basin	3.90		3.70
Photograph galleries, 1 sink	19.50		18.52
Each additional sink	7.80		7.41
Plumbing shops, one sink	7.80		7.41
Printing office, not including engine;			
six hands or less	13.00		12.35
Each additional hand	.325		.309
Restaurants or eating houses, one faucet	13.00	to	12.35 to
	39.00		37.05
Railroad offices, one wash basin	7.80		7.41
Each additional wash basin	3.90		3.70
Saloons, each faucet	10.40		9.88
Beer pumps, each	7.80		7.41
Soda fountains	13.00	to	12.35 to
	26.00		24.70
Steam boilers, per horse power,			
12 hours per day	1.95		1.85
24 hours per day	3.90		3.70
Stores, not otherwise enumerated,			
including one faucet	7.80		7.41
Theatres and moving picture shows	13.00	to	12.35 to
	78.00		74.10
Urinals with self-closing faucets, each	6.50		6.17
Not self-closing, each	13.00		12.35
Veterinary hospitals	15.60	to	14.82 to
	31.20		29.74
Warehouses, each	7.80		7.41
Water closets, self-closing, each	6.50		6.17
Not self-closing, each	13.00		12.35
Wholesale liquor stores, one faucet	3.90		3.70
Work shops, ten persons or under	6.50		6.17
Each additional person	.325		.309

AUTOMOBILE AND STABLE RATES

Public garage	31.20	to	29.74 to
	78.00		74.10
Private garage, each car	2.60		2.47
Livery, boarding and sale stables, including			
carriage washing, per horse	2.60		2.47

Peoria Water Works Co., (cont'd) - Table 1

AUTOMOBILE AND STABLE RATES (cont'd)		Gross	Net
Each additional horse		\$ 1.30	\$ 1.23
Dray and team horses, each horse		1.30	1.23
Each cow		1.30	1.23
SPRINKLING RATES BY SEASON			
Sprinkling yards and streets with hose, four hours per day, 40 foot front or less		6.50	6.17
Each additional front foot		.13	.123
On corner lots, one-half width of side street in addition to frontage per foot		.13	.123
Sprinkling streets with carts, for each team employed per month		20.80	19.76
WATER USED FOR BUILDING PURPOSES OR OTHER TEMPORARY USES			
		Gross	Net
Brick, per 1,000 laid		\$.13	\$.123
Wetting brick, per 1,000		.065	.062
Partition tile, per 1,000		.195	.185
Stone, per perch		.09	.085
Plaster, per 100 square yards		.26	.247
Water for building purposes, when brick, stone or plastering are not charged for will always be charged for at the following rates:			
Ordinary frame dwelling		2.60	2.47
Large frame dwelling		3.90	3.70
Ordinary brick dwelling		6.50	6.17
Cement walks, per square yard		.013	.012
Concrete street paving, per square yard		.013	.012
Cement curbs, per 100 lineal feet		.325	.309
Cement blocks, per cubic yard laid		.09	.085
Concrete, per cubic yard made (power mixer extra)		.13	.123
Hoisting engines, each, per week		1.30	1.23
Air compressors, each, per week		2.60	2.47
Other buildings and uses, each barrel of lime or cement		.13	.123
Flushing trenches, not exceeding 3 ft. in width and 6 ft. in depth, per lineal feet		.026	.025
For each additional foot in width add		.013	.012
For each additional foot in depth add		.013	.012
No charge for building purposes to be less than		1.30	1.23
Parties taking water from neighbor's hydrant per quarter		1.95	1.85
Parties filling cistern from neighbor's hydrant		2.60	2.47
Circus, per day		13.00	12.35 to
		26.00	24.70

Peoria Water Works Co., (cont'd) - Table 1

Rates for fixtures not enumerated previously to be proportionate to the foregoing rates.

APPLIES TO ALL TERRITORY SERVED

PRIVATE FIRE SERVICE

Available for: All customers, low or high service districts.

Rate: The rates for private fire service are annual rates which shall be payable quarterly in advance.

	RATE	
	Rate per Annum	
	Gross	Net
1,000 or less sprinkler heads, each	\$0.13	\$0.1235
On the excess over 1,000 sprinkler heads, each	.065	.06175
Each private fire hydrant	54.08	51.376

MINIMUM BILL:

The minimum charge for private fire service shall be \$65.00 per annum gross, \$61.75 net.

SPECIAL TERMS AND CONDITIONS:

No charge shall be made for water used in extinguishing accidental fires or water used for Underwriters' tests and water for any other purpose shall not be drawn from a private fire service connection.

PEORIA AND BARTONVILLE

PUBLIC FIRE SERVICE

	RATE	
	Rate per Annum	
	Gross	Net
For the first 1,000 public fire hydrants, each	\$41.60	\$39.52
For each additional public fire hydrant over first 1,000	25.00	23.75

MINIMUM BILL: None

SPECIAL TERMS AND CONDITIONS:

The rates for public fire service are annual rates which shall be payable quarterly in arrears.

PROMPT PAYMENT DISCOUNT:

If the bill is paid within ten days after its date it shall be paid according to the net charges; if not paid within ten days after its date it shall be paid according to the gross charges.

A 40% rate increase has been requested by the Peoria Water Works Company, and is presently being considered by the Illinois Commerce Commission.

= AREA SERVED BY PEORIA HEIGHTS WATER WORKS

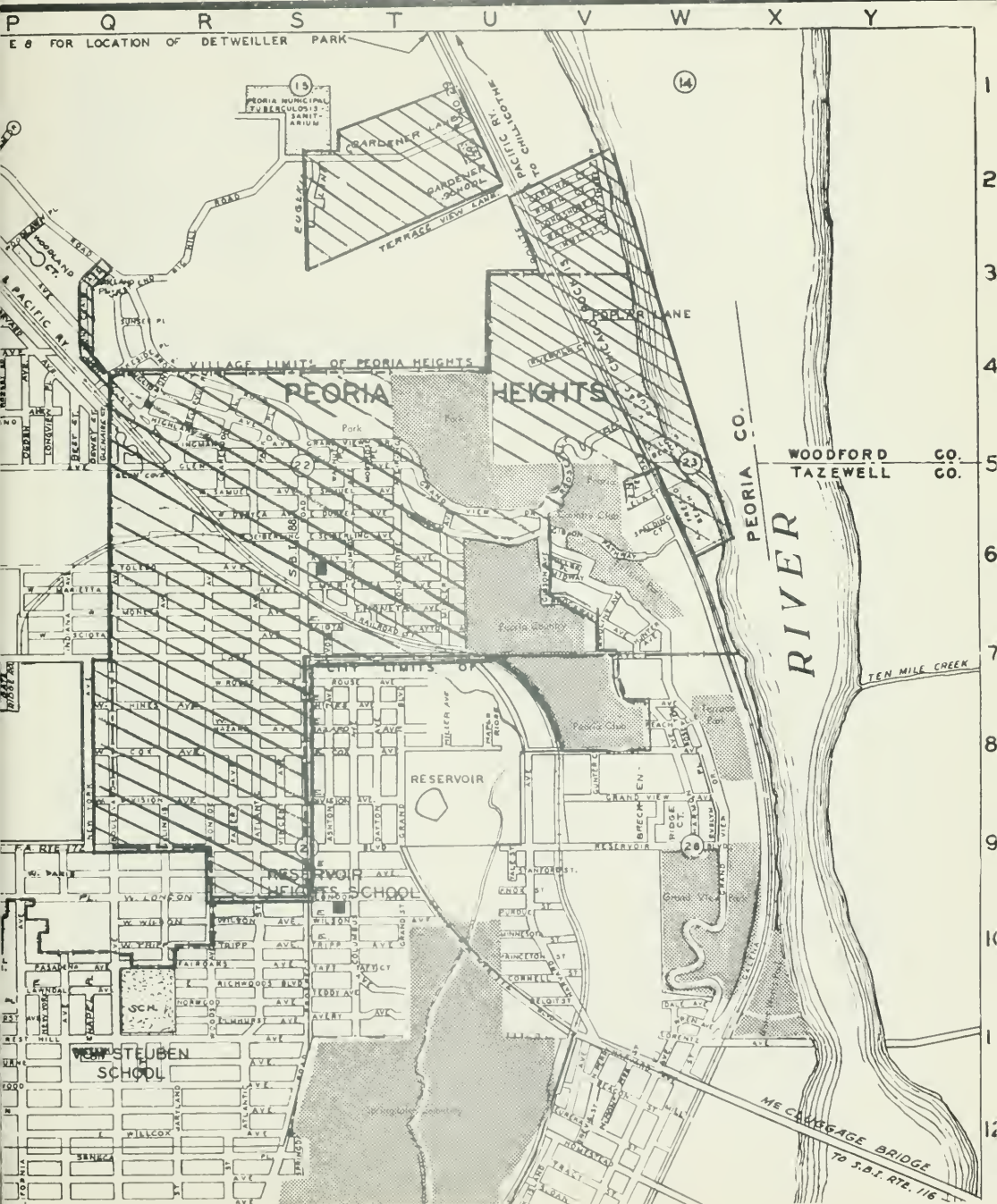




Table 2

Mineral Quality of Peoria Well Waters

	<u>Parts per Millinn</u>		General
	Min.	Max.	
Iron	0	28	0
Chlorides	3	478	30
Nitrates	0	62	15
Sulfates	40	1018	200
Calcium	35	271	100
Magnesium	23	197	40
Alkalinity as CaCO ₃	204	430	325
Hardness as CaCO ₃	134	1487	450
Residue	334	2037	650

As an example of analysis of a typical well, Caterpillar Tractor Company's Well Number 4 is as follows:

	Parts per million	Grs. per gallon
Iron	0.0	
Manganese	0.0	
Silica	14.0	
Turbidity	0.0	
Calcium	191.0	
Magnesium	73.5	
Ammonium	trace	
Sodium	168.2	
Sulfate	660.0	
Nitrate	0.2	
Chloride	29.0	
Alkalinity as CaCO ₃		
Phenolphthalein	0.0	
Methyl Orange	374.0	
Residue	1406.0	
Total Hardness	779.0	
Sodium Chloride	47.9	2.80
Sodium Sulfate	435.4	25.41
Magnesium Sulfate	362.9	21.09
Calcium Sulfate	108.9	6.35
Calcium Carbonate	374.3	21.82
Calcium Silicate	27.3	1.59

Source:

Bulletin No. 33
Illinois State Water Survey

Table 3

Percentage Composition of Dry Residue from
Filtered Illinois River Water at Peoria

Carbonate	36.7
Sulfate	18.1
Chlorine	4.9
Nitrate	2.9
Calcium	18.5
Magnesium	7.9
Sodium and Potassium	6.4
Iron Oxide	.1
Silica	<u>4.5</u>
	100.0
Salinity, parts per million	265

Source:

Quality of Surface Waters of Illinois
Collins



REPORT ON CITY WATER OF PEKIN, ILLINOIS

Water is obtained from four 25 inch wells, 100 feet deep. These provide a well capacity of 15 million gallons per day but only eight million gallons per day are pumped from them, as that is the pump capacity. The water works are presently studying the possibilities of drilling another well in south Pekin for future industrial use.

Pekin isn't experiencing the drop in the ground water level that Peoria is, evidently due to the fact that the Illinois River replenishes the ground water in the Pekin area while it doesn't in the Peoria area. From this standpoint, Pekin is in a better water position than Peoria is. Of course, a large increase in water demand in Pekin might cause the water level to drop faster than the river can replenish it. Because of adequate supply and distribution facilities, there are no restrictions on the use of water in Pekin.

The temperature of the water at the wells in Pekin is 58° F., summer and winter, and 60° F. delivered. This is cool enough for cooling compressors for air conditioning but not cool enough for direct air conditioning.

Three industries in the Pekin area use Illinois River water extensively for condensing purposes. These are Corn Products, American Distillery, and Commonwealth Edison.

The water works is a private corporation, not municipal and not a part of any large water works chain.

The mineral water analysis, rates, and a map of the area served by the Pekin water works are included in this section of the survey on the three following pages.

Source: Oral information from the Manager, Pekin Water Works.

Table 4

RATE SCHEDULE FOR PEKIN WATER WORKS

Rates authorized by the
ILLINOIS COMMERCE COMMISSION
Order No. 40681 - Effective Feb. 1, 1953

The rate for general water service consists of a service charge, based on meter size, supplemented by a consumption charge.

GROSS SERVICE CHARGE

Size of Meter	Monthly	Quarterly
5/8 inch	\$ 0.83	\$ 2.50
3/4 inch	1.00	3.00
1 inch	1.11	3.33
1 1/4 inch	1.45	4.34
1 1/2 inch	1.78	5.34
2 inch	2.05	6.17
3 inch	3.89	11.67
4 inch	7.55	22.67
6 inch	10.55	31.67
8 inch	19.39	58.17

GROSS CONSUMPTION CHARGE

	Hundred Gals. Used		Per Hundred Gals.
	Monthly	Quarterly	
1st	250	750	3.888¢
Next	2250	6750	3.000¢
Over	2500	7500	1.222¢

Ten per cent discount allowed on above when paid within 10 days of billing date.

26 25
35 16 34

MAP S
DISTRIBUTION
OF
PEKIN WATER
PEKIN.

REVISED TO

REVISED TO

REVISED TO

[illegible]

MAP SHOWING
DISTRIBUTION SYSTEM
OF THE
PEKIN WATER WORKS CO.
PEKIN, ILLINOIS

REVISED TO MATCH 1920
REVISED PL. MARCH 1920
REVISED TO 11-12-20

LEGEND

- Water Main
- Fire Hydrant
- Valve
- Manhole
- Fire Alarm Box
- Fire Station
- Fire Engine
- Fire Truck
- Fire Boat
- Fire Barge
- Fire Launch
- Fire Tug
- Fire Barge
- Fire Launch
- Fire Tug

PEKIN, ILLINOIS

ILLINOIS RIVER

COOK COUNTY

34

1920

MAP SHOWING
DISTRIBUTION SYSTEM
OF THE
PEKIN WATER WORKS CO.
PEKIN, ILLINOIS

REVISED TO MATCH 1920
REVISED PL. MARCH 1920
REVISED TO 11-12-20

LEGEND

- Water Main
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PEKIN, ILLINOIS

ILLINOIS RIVER

COOK COUNTY

34

1920

MAP SHOWING
DISTRIBUTION SYSTEM
OF THE
PEKIN WATER WORKS CO.
PEKIN, ILLINOIS

REVISED TO MATCH 1940
REVISED PL. MARCH 1940
REVISED TO 11-12-40

LEGEND

- 2" Pipe
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- 1902" Pipe
- 1908" Pipe
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- 1926" Pipe
- 1932" Pipe
- 1938" Pipe
- 1944" Pipe
- 1950" Pipe
- 1956" Pipe
- 1962" Pipe
- 1968" Pipe
- 1974" Pipe
- 1980" Pipe
- 1986" Pipe
- 1992" Pipe
- 1998" Pipe</

Table 5

STATE OF ILLINOIS
STATE WATER SURVEY DIVISION
URBANA, ILL.
March 9, 1946

MINERAL WATER ANALYSIS - PEKIN, ILL.

Sample of water collected February 26, 1946 from Well No. 1 owned by the Pekin Water Works Co., Pekin, Illinois. Location of well: about 1300' W. and 200' S. of NE corner, Sec. 3, T. 24 N., R. 5E. Depth: 90' 7".

LABORATORY NO. 105,675

Determinations Made			Hypothetical Combinations		
	Pts. per million			Pts. per million	Grs. per gallon
Turbidity	0	Sodium Nitrate	NaNO ₃	19.6	1.14
Color	0	Sodium Chloride	NaCl	9.9	0.58
Odor	0	Magnesium			
Iron	Fe	Chloride	MgCl ₂	40.5	2.36
(filtered)	Tr.	Magnesium			
(unfiltered)	Tr.	Sulfate	MgSO ₄	176.4	10.28
Manganese	Mn	Calcium			
Silica	SiO ₂	Sulfate	CaSO ₄	2.7	0.16
Calcium	Ca	Calcium			
Magnesium	Mg	Carbonate	CaCO ₃	306.2	17.85
Ammonium	NH ₄	Silica	SiO ₂	<u>18.0</u>	<u>1.05</u>
Sodium	Na				
Sulfate	SO ₄	Total.....		573.3	33.42
Nitrate	NO ₃				
Chloride	Cl				
Alkalinity (as CaCO ₃)					
Phenolphthalein	0.				
Methyl Orange	306.				
Total Hardness					
(as CaCO ₃)	497.				
Residue	611.				

STATE WATER SURVEY DIVISION

T. E. Larson, Chemist

REPORT ON ILLINOIS WATER SURVEY
PEORIA STATION

Dr. Max Suter is in charge of operations at this station, and the following information was obtained from him verbally.

Seventy-five million gallons per day (mgd) are presently being pumped from the groundwater supply in the Peoria-Pekin area. While this isn't depleting the supply, it is not leaving any water in reserve. This is a very unhealthy situation, as any new industry entering this area would cause an overpumpage.

In the past, industries have reduced pumpage by 15 mgd due to conservation methods. Another 3 to 5 mgd could be achieved by conservation in other industries. This would provide a reserve for new industries.

While there is a plentiful supply of groundwater across the Illinois River in the Washington-Morton area, there is no assurance of being able to get it out of the ground. Several drillings in that area have produced no water. River water is too hot in the summer (95° F.) for most industrial uses, so that isn't a solution. Infiltration is a possibility, but much remains to be done in this direction - more experiments, more pits, more money.

In summation, it appears that at present this area doesn't have water for any industry using large quantities for processing. Naturally, there is sufficient quantity for normal personal needs, drinking, washing, etc. This seems to be a definite road block to new industry, and in fact Dr. Suter states that several industries have questioned him in regard to water, and his answers have caused them to cross Peoria off their lists of possible sites.

A survey is currently being conducted by a private engineering consulting firm to determine just what should be done to improve the Peoria area water supply. Upon completion of this survey it is expected that immediate action will be taken to relieve Peoria's critical water situation.

WHY A WATER SHORTAGE?

Some climatologists suspect that the exposure of large areas of forests and grassland by clearing for agriculture, towns, airports, and highways may be partly responsible for the less favorable rainfall conditions in the United States in the past half century. The nation's water problems are destined to increase greatly if the damaged farm, forest, and grazing lands in the hill and mountain area are not fully rehabilitated. So far, not a single watershed of any considerable size in the United States has been adequately treated.

In the final analysis, water problems are land problems. Whether the source

of our water is above or below ground, the basic correctives for shortages or surpluses must ultimately be applied, in an integrated manner, to the land that "manufactures" the water. It will not be enough to clean up the rivers or introduce some controls on the use of underground supplies. Before we can offer cities, industries, irrigation farmers, and other users dependable supplies, we must restore the soil and cover on the abused watersheds where the water first collects.

In 1947, the rampaging Missouri, Iowa, and Illinois Rivers wrecked property and land worth \$215 million as calculated by the Corps of Engineers and Soil Conservation Service.

The United States is far behind some European countries like Denmark, Norway, and Switzerland, where, by both law and custom, ownership of forest land is recognized as a social responsibility, and sound harvesting practices are normally observed.

Source: Water, Land, and People; Bernard Frank and Anthony Netboy; 1950; Alfred A. Knopf; 1950

WATER SUPPLY

Studies of the State Water Survey Relating to Water Shortage in Peoria Area

The studies indicate that the overpumpage in the Peoria industrial area over a period of the last few years has averaged about 6 million gallons per day.

This amount is calculated from the reduction of the amount held in storage over a period of years and is based on a constant pumping rate. Any increase in this pumpage will increase the overpumpage.

There are many possible solutions to the problem of recreating a dependable and adequate groundwater supply in the Peoria Area. The methods may be classified as follows:

1. Reduction of pumpage and wastage.
2. Development of new well fields.
3. Substitution of surface water.
4. Replenishment of groundwater.

The first solution is discussed at length in a report by H. E. Hudson, Jr., Head, Engineering Subdivision, Illinois Water Survey, Urbana, Illinois, a portion of which is quoted below:

"There are five general methods for conserving water within a plant:

1. Control techniques - using less water by avoiding waste.

2. Recycling - using water over again in the same process.
3. Multiple or successive use - using water from one process for one or more additional processes in the same establishment.
4. Substitution of source - using water from another establishment, or using nonpotable waters.
5. Nonevaporative cooling techniques — using special methods to reduce the amount of water required for cooling.

Certain industries in this area have followed one or more of the above steps with excellent results, but more should do so. "

The second solution, development of new well fields, seems to have been overlooked in the present hue and cry about decreasing groundwater levels. The fact is that a huge untapped source of groundwater exists only ten miles east of Peoria, in the general vicinity of Washington and Morton, Illinois. This source is unaffected by wells in the Peoria area, and has potentially two or three times the capacity of the Peoria source. All that is necessary to bring this water to Peoria is to dig the wells and build a pipe line. While admittedly this involves an expenditure of money, certainly it is worth the expense to get a practically inexhaustible supply of water having the same composition and temperature of our present water.

It is an unfortunate fact that much derogatory information has been published about Peoria's water supply. That this information has caused many industries that might have located here to locate elsewhere can only be surmised. It certainly would be in the best interests of Peoria to publish or cause to be published, information about the large, untapped reserves of groundwater within easy reach of Peoria.

The third solution is also very feasible as indicated by the following findings:

The Illinois River, which flows through the Peoria-Pekin area, is the natural and main source of surface water. The low river flow is about 5000 cfs. * (3250 million gallons per day) and could therefore furnish ample water for all existing needs.

In former years untreated sewage from Chicago and downstream cities was discharged into the Illinois River, giving the river a reputation of being heavily polluted. This reputation is not upheld by chemical and biological studies. The studies show that the water can be used, as it is of a quality that is amenable to treatment. Nevertheless, because of public opinion, the water has not been used for municipal or domestic needs, but about 700 mgd. are used by industries for cooling and condensing purposes.

The mineral quality of the Illinois River water is characterized by its hardness-sulfate ratio. In general, the hardness (as CaCO_3) varies linearly

* This figure of 5000 cfs. does not agree with that supplied by the U.S. Engineers. Their low figure is 2,550 cfs. in 1953

with the sulfate (SO_4) concentration. The total hardness varies from 182 to 352 ppm. and the total mineral content from 196 to 443 ppm. The chlorides vary from 7 to 30 ppm. The nitrate content is less than 15 ppm.

The fourth solution, replenishment of groundwater, is at present in an experimental stage, and no definite results are available at this time.

Source: Bulletin: Illinois State Geological Survey and
Illinois Water Survey, Urbana, Illinois

TURBIDITY OF ILLINOIS RIVER WATER

The lowest turbidity reported from any station in this study was in the Illinois River at Peoria; this undoubtedly is due to sedimentation in the lakes above Peoria. The stations are Cairo, East St. Louis, Alton, Quincy, Moline, Peoria, Missouri River, St. Louis County.

Source: Temperature and Turbidity of Some River Waters in Illinois
- Max Suter

WATER SUPPLY

There has been much discussion of the effects of increased diversion from Lake Michigan into the Illinois River. As there may be some doubt in prospective industrial executives' minds as to this effect, the following report is given.

STATE OF ILLINOIS
DWIGHT H. GREEN, GOVERNOR
STATE WATER RESOURCES AND FLOOD CONTROL BOARD

REPORT EFFECTS OF AN INCREASE OF 2000 C. F. S. ANNUAL AVERAGE DIVERSION FROM LAKE MICHIGAN UPON ILLINOIS RIVER*

CONCLUSIONS

The findings reached by the technical agencies together with a summarized discussion of each follows:

Illinois Natural History Survey, Department of Registration and Education,
concludes that:

* Throughout the report the term "River" and "Waterway" are used interchangeably and are to be considered as representing the stream between Grafton and Lockport, Illinois.

1. Increased water levels, per se, resulting from a diversion of 3500 c.f.s., instead of 1500 c.f.s., will have very little effect upon fish and wildlife of the Illinois River. Higher levels may increase the area and depth of certain bottomland lakes during dry periods with some improvement in these lakes for fish. On the other hand, low water levels in these lakes during the summer allow the growth of smart weeds, rice-cut grass, etc., on mud flats, which when flooded in the fall months furnish an abundance of duck foods and serve to hold certain species of ducks in the Illinois Valley during the hunting season. The increased water levels will have little or no effect upon muskrats and other fur bearers.

2. The increased diversion with its accompanying load of nitrate is not expected to create a phytoplankton problem in the river. Backwater lakes connected with the river are believed to be the main source of river channel plankton and most of these are now leveed in drainage districts. The turbidity and movement of water in the river is believed to be sufficient to check extensive growth of microscopic plants.

3. Real improvement in biological conditions in the Illinois River can result only with improvement in the efficiency of sewage treatment at Chicago, prior to release of this effluent into the water course. Increased diversion will improve conditions near Chicago, but it is expected to extend the range of moderate pollution downstream.

The Division of Waterways, Department of Public Works and Buildings,
concludes that:

It is to be expected that an increase in the annual average diversion of 2000 c.f.s. will result in the following:

1. Water stages will be increased .1 foot to 1.6 feet, mainly with average or low discharges.

2. Changes in pool surface areas for average conditions will be negligible.

3. The estimated increase costs to the levee districts will equal approximately \$7,725 per year, or \$193,175 capitalized at 4%.

4. Navigation interests should not be adversely affected except at certain few critical sections. At these sections, velocity increases for average flows should not exceed .65 feet per second or .45 miles per hour. Water slopes are only slightly increased; therefore, velocity increases will also be minor.

5. The general regimen of the Illinois River will not be appreciably affected by the suggested increase in diversion.

The State Water Survey, Department of Registration and Education, concludes that:

1. Increased diversion, if budgeted for low water flows, will not wash more sewage downstream from Chicago.

2. By proper budgeting and control, undesirable raises in water level can be avoided.

3. If the increased diversion is used during periods of low flow, there should be an improvement in the quality of the water in the Illinois Waterway, but relatively small in amount.

4. It is believed that increased diversion will have little, if any, effect, good or bad, upon the Illinois River as a source of domestic or industrial water supply.

5. The average duration of the pool stage at Peoria will be reduced from 270 to 260 days per year. Increase above pool stage will be from .8 at full capacity of pool stage to .3 foot at flood stage of 1943.

6. Minimum velocities in the river at Peoria will increase from an average .52 foot per second to .78 foot per second. At stages above pool levels, the velocities will be the same for the same river stage.

7. Water temperatures in Peoria Lake should not be materially changed.

8. Turbidity should not be increased.

9. It is doubtful that increased diversion would materially affect the bacterial count of the river water. For many years, the Illinois River at Peoria has had the necessary amount of oxygen to support the needed biological aerobic activity.

10. Additional diversion may be beneficial to the stream due to the increase in oxygen content brought in by the fresh water.

11. Lake Michigan is an important source of water for municipal use. An increased use by suburban communities amounting to 200 to 300 c.f.s. is anticipated in the not distant future. At the same time, a decrease is expected in the consumption by the City of Chicago.

The State Sanitary Water Board, Department of Public Health, concludes:

1. While an increase in diversion would normally be expected to increase the oxygen content of the stream, based upon the data secured during this study, no precise predictions appear warranted at this time as to the effect of the proposed increase in diversion on the dissolved oxygen demand, especially in the lower part of the river.

2. The tributaries of the Illinois River do not contribute a significant amount of pollution to the main stream.

3. There is no apparent health hazard due to diversion and none is expected with the increased diversion.

The Department of Agriculture, represented at the conferences, does not wish to add any conclusions to the above.

The Division of Geology, Department of Registration and Education, was also represented but considers that it has nothing of interest to add to the above matters.

The Department of Conservation adopts the conclusions of the State Natural History Survey.

The State Water Resources and Flood Control Board, after consideration of the above findings, concludes:

1. That it would promote the general welfare of the State of Illinois, and particularly the inhabitants of the Illinois River Valley, if the waters of the river were at all times of a quality sufficient to sustain fish life and avoid the creation of a nuisance.

2. That the minimum desirable specification for such a water, by present day standard, is that it should contain at least four parts per million of dissolved oxygen.

3. That, when the Sanitary District of Chicago has achieved the point of treating all sewage and industrial wastes to an efficiency of 90%, it appears that 2000 c.f.s. additional diversion of Lake Michigan waters in addition to the present 1500 c.f.s. now authorized will be necessary if the quality of water specified in Conclusion No. 2 is to be achieved.

4. That from data available an increase of 2000 c.f.s. would raise river stages for average flows from 0 to 1.2 feet and for low flows from 0 to 1.6 feet. The most pronounced increases occur in the tail water regions of the various dams, particularly those dams at LaGrange and Peoria.

5. That these increased stages would cause increased pumpage costs in drainage and levee districts on the lower river to the estimated amount of \$7725 annually.

6. That currents in critical sections of the river will be increased by varying amounts, the estimated maximum increase for average conditions being .45 miles per hour for the canal immediately below Lockport.

7. That the effects of the suggested increased diversion will be primarily evident in the Lockport, Brandon Road and Dresden Island Pools.

8. That there is not at hand at the present time sufficient data to definitely evaluate the degree to which the proposed increase in diversion will improve the dissolved oxygen content of the lower river, i.e. below Peoria, though it may be concluded that the maximum beneficial effects in dissolved oxygen content will be apparent in the Brandon Road and Dresden Island Pools and may be expected to improve conditions in the lower river.

9. That, assuming complete treatment of sewage, no flushing of putrescible sludge into the lower river will result from the suggested increase in diversion.

10. That the effect of increased diversion on fish life may be expected to be generally beneficial, that is to say, the limits of suitable environment for fine fish will probably be extended upstream. The degree to which this will be attained can only be determined through further study and actual experience.

11. That the proposed increase in diversion will have no effect on the general health of the valley.

12. That no detrimental effect can be expected from the increased diversion on municipal and industrial water supplies.

13. That, as a result of the studies necessary for the preparation of this report, there is indicated a need for the establishment under this Board of a long range over-all program for the investigation and study of the need for increased diversions.

RECOMMENDATIONS

The State Water Resources and Flood Control Board recommends:

1. That any approval by the State of any move on the part of the Chicago Sanitary District looking toward an increase in diversion from Lake Michigan be predicated on the complete treatment of all sewage arising in the District to the maximum efficiency attainable within the method of treatment adopted.

2. That upon the completion of Chicago's projected sewage treatment plants the suggested increase of 2000 c.f.s. be accepted as acceptable subject to revision in the light of revised data.

3. That the State will assume no direct or contingent liability for any damages to persons or property as a result of the 2000 c.f.s. increase in diversion and, further, that these recommendations are not to be construed to relieve the Sanitary District of Chicago of any liability for damages resulting from the increase of water from Lake Michigan.

4. That the technical agencies of the Board are hereby authorized and directed to continue the investigation now started with the view of establishing a body of data adequate for development of final conclusions and recommendations in the future.

5. That, in the event of any increase in authorized diversion, that over-all control or budgeting of the total annual diversion available rest in the State Water Resources and Flood Control Board to the end that the maximum benefits from any such increased diversion may be obtained.

December, 3, 1947

Springfield, Illinois

Source: State of Illinois
Department of Public Works and Buildings
Division of Waterways
Report

DIVERSION FROM LAKE MICHIGAN

For a somewhat different viewpoint on the diversion question, the U. S. Engineers have this to say:

Referring to the daily discharge of the Illinois River at Peoria and Pekin from 1911 to 1935, Page 216, it will be noted that a rather drastic drop off in the "low" occurred in 1938 and again in 1939. This drop off was due to the enactment of the diversion law by Congress, limiting the diversion from Lake Michigan. At present there is a new diversion bill under consideration raising the permitted diversion. In view of the possible necessity of using the Illinois River as a source of water, this increased diversion may be of great importance to the Peoria Area.

The minimum daily flow in 1953 was 2550 cfs. or 1648 million gallons per day (mgd). 84.3 mgd. are presently pumped from wells in the Peoria area, and 720 mgd. are pumped from the Illinois River, which indicates a total pumpage of 804.3 mgd. This figure is approximately half of the minimum available (1648 mgd.) and undoubtedly the demand will increase in the future.

This is definitely an unhealthy situation. Even though a large part of this water used is returned to the river, it is returned in a partially polluted state (see waste disposal section of survey) unfit for use as a water supply. Many communities below Peoria use the Illinois River as a water source, and many more will use it in the future. If Peoria were to draw all its water from the River, these communities down river would undoubtedly protest.

With this in mind, it is evident that increased diversion is one answer to the problem. However, the present bill in Congress isn't the answer to the

problem. There is no stipulation in the bill that Chicago must maintain a minimum discharge, in fact, the reverse is true. They cannot exceed a certain maximum average daily diversion. There is no assurance at all that increased diversion will result in a higher minimum discharge at Peoria.

In order to provide a suitable supply for all communities on the river, the bill should call for a minimum daily discharge of 9000 cfs. at Pekin, Illinois. In addition, Chicago should be prevented from dumping untreated sewage into the Chicago River at any time (in flood stage or not) and there should be a definite limit or proportion to the amount of treated sewage they can dump. Obviously, if along with increased diversion, there is increased pollution, no problems are solved.

Source: Information supplied both in writing and verbally
by the U.S. Engineers, Peoria, Illinois

Table 6

DAILY DISCHARGE OF ILLINOIS RIVER AT
PEORIA, ILLINOIS FOR 1911 - 1934

Year	Maximum Mean Daily Maximum cfs.	Minimum Mean Daily Minimum cfs.
1911	23,300	8,040
1912	42,800	9,720
1913	55,000	9,440
1914	22,900	8,880
1915	35,800	9,720
1916	35,300	9,860
1917	34,800	10,800
1918	41,800	9,720
1919	54,000	9,020
1920	53,000	9,020
1921	26,700	9,580
1922	56,700	9,580
1923	26,700	9,440
1924	39,000	11,400
1925	24,000	9,300
1926	58,300	10,500
1927	56,100	11,300
1928	31,000	11,800
1929	46,900	11,600
1930	40,700	8,100
1931	28,900	8,960
1932	30,300	9,100
1933	52,100	8,480
1934	20,700	8,480

Source: Stream Flow Data of Illinois
Department of Public Works and Buildings
Waterways Division
State of Illinois

Table 7

DAILY DISCHARGE OF ILLINOIS RIVER AT PEKIN FOR 1935 - 1953

Year	High	Low
1935	53, 700	12, 300
1936	44, 300	10, 500
1937	41, 700	10, 400
1938	46, 400	6, 050
1939	39, 400	3, 000
1940	20, 000	3, 600
1941	31, 100	3, 800
1942	47, 400	3, 950
1943	82, 200	3, 800
1944	64, 800	3, 150
1945	43, 800	3, 000
1946	46, 400	3, 600
1947	42, 200	3, 000
1948	55, 300	4, 150
1949	35, 000	3, 150
1950	69, 500	4, 150
1951	50, 600	4, 800
1952	37, 100	2, 700
1953	25, 600	2, 550

Source: U. S. Engineers
Peoria, Illinois

Table 8

ANALYSIS OF URBAN WATER SUPPLY AND DETAILS OF TREATMENT

City	1940 Census Population	RAW WATER SUPPLY	
		Average Hardness as CaCO ₃ p. p. m.	Ave. pH
Davenport	66,039	146	7.6
Des Moines	159,819	303	6.9
Evansville	97,062	113	7.4
Moline	34,608	135	7.4
Pekin	19,407	354	7.4
Peoria	105,087	341	7.2
Rockford	84,637	328	7.5
Rock Island	42,775	126	7.8

City	Average Hardness as CaCO ₃ p. p. m.	Ave. pH	TREATED OR TAP WATER	
			Source	Type of Treatment *
Davenport	158	7.1	R	P-Ca-T-Nc- Dc-Mh-S-Cl- Fr-Dc-Kp
Des Moines	303	6.9	Inf. Gal.	I-Cao-Scb- Mp-Dc
Evansville	132	8.1	R	P-Ng-Dc-Ca- T-Mh-Sc-Fr- Dc-Kp
Moline	162	7.2	R	Dc-Ng-T-Cal- As-M-S-Fr-Dc- Ng-Kp
Pekin	354	7.4	Wells	Dc
Peoria	346	7.2	Wells	Dc
Rockford	328	7.5	Wells	Dc
Rock Island	145	7.0	R	P-Ca-So-Mb- Dc-Fr-Ng-Kp

Source: Water Supply Data of the United States
American Iron and Steel Institute, 1945

* For explanation of symbols, see legend on next two pages.

Table 8 (cont'd)

ANALYSIS OF URBAN WATER SUPPLY AND DETAILS OF TREATMENT

LEGEND FOR PAGE 217

(From U. S. Public Health Service Census of Water Treatment Plants)

SOURCE OF SUPPLY

Aq	Aqueduct	L	Lake
Art	Artificial	P	Pond
Br	Brook	R	River
Cr	Creek	Res	Reservoir
Fk	Fork	Spr	Spring
Gal	Gallery	Str	Stream
Imp	Impounding or Impounded	W	Well
Inf	Infiltration		

TREATMENT

Type of Plant

Purification	P
Iron or Manganese Removal	I
Softening	H
Disinfection	D

Treatment or Device

Aeration	A
Overflow trays, cascade or other splash aerating device	At
Aeration contact bed, filled with coke or other material	Ac
Spray aerator	As
Patented aerator	Am
Other type aerator	Ao
Chemical dosage for coagulation or softening	C
With alum	Ca
With lime	Cl
With iron salts	Ci
With soda ash	Cs
With other coagulant	Co
Activated Carbon	T
Sedimentation	S
Open basins	So
Covered basins	Sc

Table 8 (cont'd)

ANALYSIS OF URBAN WATER SUPPLY AND DETAILS OF TREATMENT

(Sedimentation, cont'd)

Mechanical sludge removal	Sm
Baffled basins (other than inlet and outlet baffles).	Sb
Upward flow cylindrical tanks	Sv

Mixing device or tank	M
Rapid mechanical mix.	Mt
Baffled mix	Mb
Slow mechanical mix	Mp
Air agitation mix	Ma
Mix by hydraulic means	Mh
Patented sludge blanket	Ms

Filtration	F
Slow sand filters	Fs
Rapid sand filters (gravity type)	Fr
Pressure filters	Fp
Zeolite filters	Fz
Contact or roughing filters	Fc

Disinfection	D
By hypochlorite	Dh
By chlorine gas	Dc
By other means	Do

Ammoniation	N
With NH_3 gas.	Ng
With ammonium compound	Nc

Chemical dosage for corrosion correction or water stabilization . .	K
By alkali feed for pH adjustment	Kp
By feed of phosphate compounds	Kc
By sodium silicate	Ko
By chlorine gas	Kg

Sodium Hexametaphosphate	X
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Recarbonation	R
-------------------------	---

Note: For treatment legend with more than two letters
First Capital Letter controls basic treatment.

Table 9

ANALYSIS OF STATE WATER SUPPLY

Average Hardness and pH

State	Hard- ness	Number Supplies Averaged	RAW WATER SUPPLY	
			pH	Number Supplies Averaged
Illinois	292	554	7.7	49
Indiana	331	260	7.4	261
Iowa	520	1334	7.5	24
State	Hard- ness	Number Supplies Averaged	TREATED OR TAP WATER	
			pH	Number Supplies Averaged
Illinois	143	76	8.3	75
Indiana	220	36	7.8	36
Iowa	166	32	7.9	32

Table 10

ANALYSIS OF PEORIA-TAZEWEEL COUNTY
URBAN WATER SUPPLY AND FACILITIES

Municipality	County	Own- er- ship *	Date Inst.	Source	Treatment		
					Kind *	Date	Cap. Mgd.
Bartonville	Peoria	P	1909	From Peoria	-	-	-
Chillicothe	Peoria	M	1891	Drift wells	C	1926	-
Creve Coeur	Tazewell	M	1937	Drift well	-	-	-
Deer Creek	Tazewell	M	1907	Rock wells	-	-	-
Delavan	Tazewell	M	1887	Drift wells	-	-	-

* For explanation of symbols, see legend at end of table.

Table 10 (cont'd)

Municipality	County	Own- er- ship *	Date Inst.	Source	Treatment		
					Kind *	Date	Cap. Mgd.
East Peoria	Tazewell	M	1916	Drift wells	C	1935	-
Elmwood	Peoria	M	1896	Rock well	-	-	-
Glasford	Peoria	M	1917	Rock well	-	-	-
Hopedale	Tazewell	M	1894	Drift wells	-	-	-
Mackinaw	Tazewell	M	1893	Drift wells	S	1942	-
Minier	Tazewell	M	1891	Drift well	-	-	-
Morton	Tazewell	M	1895	Drift wells	SI	1939	.57
N. Chillicothe	Peoria	M	1941	Drift well	-	-	-
Pekin	Tazewell	P	1886	Drift wells	C	1941	-
Peoria	Peoria	P	1868 (1913)	Drift wells	C	1918	-
Peoria Heights	Peoria	M	(1935)	Drift wells	-	-	-
Princeville	Peoria	M	1915	Rock wells	-	-	-
South Pekin	Tazewell	M	1925	Drift wells	-	-	-
Tremont	Tazewell	M	1911	Drift wells	-	-	-
Washington	Tazewell	M	1887	Drift wells	-	-	-

Source: Data on Illinois Public Water Supplies,
Illinois Department of Public Health, 1944

Table 10 (cont'd)

WATER SUPPLY

Municipality	STORAGE - 1000 GAL.S.			Power Used	Pumpage 1000 GPD.	Well Pump Type
	Ground Surface	Elevated	Total			
Bartonville	-	-	-	-	100	-
Chillicothe	-	100	100	Ep	108	S
Creve Coeur	-	100	100	-	60	To
Deer Creek	-	13.5	13.5	Ep O	7	D
Delavan	-	75	75	EpC	92	To
East Peoria	100	80	180	Ep	500	D
Elmwood	100	6.38	106.38	Ep G	70	A
Glasford	-	50	50	Ep	20	To
Hopedale	-	50	50	Ep G	17	D
Mackinaw	50	13.5	63.5	Ep	35	To D
Minier	-	63	63	Ep	60	Tw
Morton	-	75	75	Ep	60	To D
N. Chillicothe	-	50	50	Ep	25	Tw
Pekin	-	2690	2690	Ep	1134	To
Peoria	19000	100	19100	Ep	8500	ToS
Peoria Heights	300	50	350	Ep	1500	To
Princeville	100	50	150	Ep	80	To
South Pekin	-	60	60	Ep G	30	D T
Tremont	-	40	40	Ep	50	D Tw
Washington	-	80	80	Ep G	135	To D

Table 10 (cont'd)

WATER SUPPLY						
Municipality	How Paid	RATES			Average	
		Min. charge		Range dollars per 1000 G.	Tot. Mineral Content ppm.	
		\$	Amt. 1000 G.		Raw	Treat.
Bartonville	M	.35	1	.08 to .35	464	-
Chillicothe	Q	1.75	4.5	.20 to .39	563	-
Creve Coeur	M	1.67	4	.10 to .42	524	-
Deer Creek	Q	2.50	3	.30 to .83	310	-
Delavan	Q	2.00	3.75	.20 to .53	312	-
East Peoria	Q	1.50	5	.20 to .30	573	-
Elmwood	Q	1.80	3	.30 to .60	1485	-
Glasford	Q	1.50	3	.40 to .50	1700	-
Hopedale	M	.25	1	.25	374	-
Mackinaw	Q	2.25	4.5	.30 to .50	498	-
Minier	6 M	3.00	6	.50	417	-
Morton	Q	2.25	3.38	.67 Flat	470	507
N. Chillicothe	Q	1.75	4.7	.20 to .37	406	-
Pekin	Q	1.67	5	.11 to .33	502	-
Peoria	M	.35	1	.08 to .35	464	-
Peoria Heights	M	.50	1	.25 to .50	654	-
Princeville	M	1.00	2.5	.20 to .40	1605	-
South Pekin	Q	3.00	9	.20 to .33	475	-
Tremont	Q	1.20	2	.60	587	-
Washington	M	1.00	2.86	.15 to .35	363	-

Table 10 (cont'd)

WATER SUPPLY

Municipality	Average Hardness ppm				Average Iron ppm	
	Total		Carbonate		Raw	Treat.
	Raw	Treat.	Raw	Treat.		
Bartonville	341	-	264	-	0.05	-
Chillicothe	443	-	260	-	0.04	-
Creve Coeur	517	-	323	-	0.05	-
Deer Creek	290	-	290	-	2.9	-
Delavan	189	-	189	-	2.3	-
East Peoria	485	-	320	-	-	-
Elmwood	365	-	240	-	0.25	-
Glasford	243	-	243	-	0.4	-
Hopedale	345	-	345	-	1.3	-
Mackinaw	365	66	258	66	0.06	-
Minier	286	-	286	-	2.8	-
Morton	336	58	336	58	2.9	0.5
N. Chillicothe	304	-	208	-	0.2	-
Pekin	370	-	279	-	0.1	-
Peoria	341	-	264	-	0.1	-
Peoria Heights	469	-	370	-	0.0	-
Princeville	336	-	232	-	0.9	-
South Pekin	366	-	278	-	0.2	-
Tremont	397	-	397	-	3.3	-
Washington	343	-	339	-	1.2	-

Table 10 (cont'd)

WATER SUPPLY

LEGEND FOR PAGES 220 - 224

Ownership

M Municipal
P Private

Power Used

C Coal
G Gasoline
O Oil
N Natural Gas
Art. Pres. Artesian Pressure
Em. Electricity Generated by Municipally
Owned Utility
Ep Electricity Generated by Privately
Owned Utility
Tr Tractor

Source

I Impounding Reservoir
C Channel Dam
em Emergency

Well Pump Type

T Turbine
To Turbine Oil Lubricated
Tw Turbine Water Lubricated
A Air Lift
D Deep Well Pump (plunger type)
S Suction
Gr Gravity
Si Siphon

Treatment

P Purification
S Softening
I Iron Removal
C Chlorination
Cem Emergency Chlorination
ReC Rechlorination

Rates

M Monthly
2M Two Months
Q Quarterly
Y Yearly
6M Semi-annually

Table 10 (cont'd)

WATER SUPPLY

LEGEND FOR PAGES 220 - 224 (cont'd)

Miscellaneous

* Pressure Tank
p. p. m. Parts Per Million

Table 11

WATER USE PER UNIT OF PRODUCT

For purposes of comparison, a few of the data on water use per unit of product from among the 1,300 responses to Question 19 of the questionnaire, is presented below along with similar data from other sources. This is a preliminary tabulation, given only to indicate the considerable scope of the information on this subject received through the questionnaire. Some of the variations in figures reported for the same product undoubtedly may be accounted for by more specific identification of the manufacturing processes involved from plant to plant.

Product	Unit	Consumption Gallons	Source of Data
APPAREL AND TEXTILE			
Viscose Rayon	1 ton	180-200,000 200,000	Chem. Engineer - '48 Ohio Water Res. Bd.
Rayon Manufacture	1 ton	320	J. AWWA - 1946
Rayon Yarn	1 ton	250,000	NAM Conservation Fdn.
	1 ton	334,000	"
	1 ton	365,000	"
	1 ton	403,974	"
Weave, Dye & Finish Rayon Textiles	1M yds	15,000	"
Cotton Goods			
Bleaching	1 ton	60-80,000	Chem. Engineer - '48
Dyeing	1 ton	8-16,000	"
Bleaching & Dyeing	1 ton	55,000	NAM Conservation Fdn.
Bleach, Dye & Treat	1M yds.	1,000	"
	1M yds	10,000	"
	1M yds	15,000	"

Table 11 (cont'd)

Product	Unit	Consumption Gallons	Source of Data
APPAREL AND TEXTILE (cont'd)			
Cotton Cloth Processing	1 ton	10-16, 000	Ohio Water Res. Bd
Woolens & Worsteds	1 ton	140, 000	J. AWWA - 1946
Woolen Cloth	1M yds.	40, 000	NAM Cons. Fdn.
Worsted Cloth	1M yds.	77, 000	"
Woolen Cloth	1M yds.	146, 000	"
Woolen Cloth	1M yds.	510, 000	"
Raw Wool to Finished Cloth	1M yds.	8, 335	"
Wool Scouring	1 ton	2, 520	J. AWWA - 1946
Scoured Wool	1M lbs. raw	31, 000	NAM Cons. Fdn.
CHEMICALS & DRUGS			
Soap	1 ton	500	Chem. Engineer-'48
	1 ton	4, 493	NAM Cons. Fdn.
Ice	1 ton	240	"
	1 ton	300	"
	1 ton	5, 000	"
	1 ton	9, 000	"
ELECTRICAL			
Steam generation of power	1M kwh	80, 000	Ohio Water Res. Bd.
	1M kwh	80, 000	NAM Cons. Fdn.
	1M kwh	52, 000	"
	1M kwh	68, 000	"
	1M kwh	80, 000	"
	1M kwh	90, 000	"
	1M kwh	170, 000	"
FOOD, BEVERAGES, TOBACCO			
Cane Sugar Refining	1 ton	1, 000	J. AWWA - 1946
"Condensing"	1 ton	4-9, 000	Chem. Engineer-'48
"Processing"	1 ton	1, 500	"
Cane Sugar (refined)	1 ton	4, 000	NAM Cons. Fdn.
	1 ton	8, 000	"
	1 ton	27, 920	"
Beet Sugar (refined)	1 ton	24, 000	"
	1 ton	26, 000	"
	1 ton	34, 000	"
Corn Syrup	1 bu. corn	30--40	Ohio Water Res. Bd.
	1 bbl. (50 G)	3, 180	NAM Cons. Fdn.

Table 11 (cont'd)

Product	Unit	Consumption Gallons	Source of Data
FOOD, BEVERAGES, TOBACCO (cont'd)			
Beer and Ale	1 bbl.	470	J. AWWA - 1946
	1 bbl.	298	NAM Cons. Fdn.
	1 bbl.	362	"
	1 bbl.	527	"
	1 bbl.	2,500	"
"Brewing"	1 bbl.	470	Ohio Water Res. Bd.
Whiskey Manufacturing	1M gal.	80,000	J. AWWA - 1946
Mashed Grain	1M bu.	600,000	Chem. Engineer-'49
	1M bu.	3-600,000	Ohio Water Res. Bd.
Distilled Whiskey	1M gal.	70,000	NAM Cons. Fdn.
Distilling 100 Proof Alcohol			
Processing	1M gal.	8,400	Chem. Engineer-'49
Cooling	1M gal	120,000	"
Dairying	1 gal. milk	5	Ohio Water Res. Bd.
Milk, cream, butter	100 lbs.	11-25	in Engineers Jt. Council Rept. on Nat. Water Policy, 1950*
Fluid milk	1 cwt.	.063	NAM Cons. Fdn.
	1 cwt.	.22	"
	1 cwt.	2.07	"
Canned tomatoes	1 bu.	60	Ohio Water Res. Bd.
Canned corn	1 ton corn on cob	1,000	"
	100 cases (24 No.2)	7,200	NAM Cons. Fdn.
Canned peas & corn	100 cases (24 No.2)	5,000	"
Green beans	100 cases	3,500	Fed. Res. Bk. Dallas
Spinach	100 cases	16,000	"
Meat packing (hogs)	1 ton live animals	6,000	Ohio Water Res. Bd.
	100 hogs (dressed & by-prods.)	24,000	NAM Cons. Fdn.
STEEL			
Highly finished	1 ton	65,000	Ohio Water Res. Bd.

Table 11 (cont'd)

Product	Unit	Consumption Gallons	Source of Data
STEEL (cont'd)			
Rolled Steel			
Cold rolled strip	1 ton	6,000	NAM Cons. Fdn.
Steel sheets & coils	1 ton	13,000	"
Hot rolled steel plates	1 net ton	15,000	"
Cold rolled, high carbon, strip	1 ton	62,000	"
Rolled steel	1 ton	80,000	"
Rolled steel	1 net ton	110,000	"
PAPER & PULP			
Sulphate pulping	1 ton	70,000	Chem. Engineer - '48
	1 ton	64,000	J. AWWA - 1946
Unbleached sulphate pulp	1 ton	35,000	NAM Cons. Fdn.
Bleached sulphate pulp	1 ton	53,000	"
Soda pulp	1 ton	85,000	J. AWWA - 1946
Soda pulp & bleaching	1 ton	60,000	Chem. Engineer - '49
Soda pulp, plain & coated book paper	1 ton	53,000	NAM Cons. Fdn.
Sulphite pulp	1 ton	60,000	J. AWWA - 1946
	1 ton	80,000	NAM Cons. Fdn.
Paperboard	1 ton	7,692	"
	1 ton	15,360	"
	1 ton	90,000	"
PETROLEUM PRODUCTS			
Oil refining	1M bbl.	770,000	Chem. Engineer - '49
	1M bbl.	770,000	J. AWWA - 1946
	1M bbl.	770,000	Ohio Water Res. Bd.
Aviation gasoline	1M bbl.	1,050,000	Fed. Res. Bk. - Dallas
Refined Petroleum Products (processed crude)			
	1M bbl.	151,000	NAM Cons. Fdn.
	1M bbl.	260,000	"
	1M bbl.	470,000	"
	1M bbl.	2,100,000	"
	1M bbl.	15,000,000	"

Table 11 (cont'd)

Product	Unit	Consumption Gallons	Source of Data
PETROLEUM PRODUCTS (contd')			
Synthetic gasoline	1M bbl.	15,834,000 (estimated)	Std. Oil of N. J.
COAL & COKE			
Coal washing	1 ton	200	Ohio Water Res. Bd.
Washed coal	1 ton	30	NAM Cons. Fdn.

*

Based on U. S. Dept. of Agriculture's figures for creamery butter, liquid milk and cream sold in communities.

Chemical Engineering, January 1948, p. 137

Chemical Engineering, July 1949, p. 119

Ohio Water Resources Board, Seventh Annual Report 1948, (State of Ohio, Dept. of Public Works.)

Federal Reserve Bank of Dallas, Monthly Business Review, July 1, Aug. 1, 1948.
Water Resources in the Southwest.

Standard Oil of New Jersey, The Lamp, (n. d.)

Engineers Joint Council, National Water Policy, 1950

National Association of Manufacturers - Conservation Foundation, Water in Industry, Survey of Industrial Plant Water Supply and Waste Disposal, 1950.

Source: Water in Industry, National Association of Manufacturers and the Conservation Foundation, December, 1950

WATER IN INDUSTRY

Table 12

Plants Classified According to the Products They Manufacture

Product	Number of Plants	Percent of Total
Apparel and textiles	276	8.3%
Autos and aircraft	122	3.7
Chemicals and drugs	229	6.8
Electrical (Power Gen. & Equip. Mfg.)	153	4.6
Foods, beverages, & tobacco	374	11.2
Iron and steel	385	11.5
Leather	39	1.2
Lumber and furniture	170	5.1
Machinery and tools	586	17.5
Non-ferrous metals	143	4.3
Optical, medical & scientific supplies	47	1.4
Paper and pulp	177	5.3
Petroleum products	54	1.6
Plastics	28	.8
Stone and glass	224	6.7
Toys, novelties, sport goods	23	.7
Misc. and unspecified	<u>313</u>	<u>9.4</u>
Total	3,343	100.0%

Table 13

Degree to Which Waste Water is Treated, by Industry

Percent of Plants in Industry Using:*

Industry	No Treatment	Moderate Treatment	Essentially Complete Treatment
Apparel and textiles	87%	10%	4%
Autos and aircraft	86	11	3
Chemicals and drugs	73	18	9
Electrical (power gen., etc.)	91	4	4
Foods, beverages, tobacco	81	12	7
Iron and steel	84	12	4
Leather	68	32	-
Lumber and furniture	93	5	2
Machinery and tools	91	5	4
Non-ferrous metals	84	12	5

Industry	Table 13 (cont'd)		Essentially Complete Treatment
	No Treatment	Moderate Treatment	
Optical, medical, scientific	88%	10%	2%
Paper and pulp	63	30	7
Petroleum products	41	48	11
Plastics	92	4	4
Stone and Glass	78	15	8
Toys, novelties, sport goods	77	18	6
Misc. and unspecified	81	14	6
All plants, combined	82	13	5

* The percentages for each industry should total 100 percent, but do not in every case because of rounding.

N. B. It should be recalled that in some industries waste does not require treatment prior to disposal.

Table 14

Recovery of Useful By-Products in Treatment of Waste Water, by Industries

Industry	No. of plants which treat waste water	No. which recover useful by-products	% which recover useful by-products
Apparel and textiles	33	6	18%
Autos and aircraft	15	3	20
Chemicals and drugs	58	17	29
Electrical	12	2	17
Foods, beverages, tobacco	65	23	35
Iron and steel	54	12	22
Leather	11	2	18
Lumber and furniture	10	1	10
Machinery and tools	45	3	7
Non-ferrous metals	21	7	33
Optical, medical, scientific	5	2	40
Paper and pulp	58	38	66
Petroleum products	32	24	75
Plastics	2	0	0
Stone and glass	47	7	15
Toys, novelties, sport goods	4	1	25
Misc. and unspecified	49	11	22
All industries	521	159	30

Source: For Tables 10 through 12 Water In Industry National Association of Manufacturers and The Conservation Foundation, December 1950.

Table 15

Distribution of Plants According to Daily Water Intake in 1949
by Metropolitan Areas

(in thousands of gal. per day) of:
Percent of plants having water intake

Area	Less than 50	50 to 250	250 to 1000	1000 to 10,000	10,000 & over	No. of plants
Akron, Ohio	67%	17%	0%	17%	0%	6
Canton, Ohio	38	25	25	12	0	8
Chicago (Ill. & Ind.)	42	31	15	8	5	154
Cincinnati (O. & Ky.)	44	30	22	3	0	36
Cleveland, Ohio	54	16	14	11	5	63
Columbus, Ohio	21	21	43	0	14	14
Dayton, Ohio	46	9	18	27	0	11
Detroit, Mich.	50	21	9	11	9	56
Flint, Mich.	67	0	33	0	0	3
Indianapolis, Ind.	35	12	24	30	0	17
Kansas City (Kan & Mo)	58	37	0	5	0	19
Louisville (Ky & Ind)	17	34	34	17	0	12
Milwaukee, Wisc.	48	22	16	9	5	58
Minneapolis-St. Paul	50	18	18	10	3	38
PEORIA	38	12	12	12	25	8
St. Louis (Mo & Ill)	42	24	11	18	4	45
South Bend, Ind.	50	50	0	0	0	4
Toledo, Ohio	36	9	27	9	18	11
Youngstown (O & Pa)	30	10	40	10	10	10
Plants not in metro- politan areas	45	21	15	12	6	1524
All plants combined	46	21	16	12	5	3057

Source: See Table 12

Table 16

Average Percent Increase in Water Intake Per Plant, 1939 to 1949
By Metropolitan Areas

Area	Average Percent Increase	Number of plants
Akron	62%	3
Canton	35	7
Chicago	54	115
Cincinnati	18	25
Cleveland	95	50
Columbus	99	12
Dayton	0	8
Detroit	70	32
Flint	10	2
Indianapolis	35	12
Kansas City	39	14
Louisville	45	9
Milwaukee	54	40
Minneapolis-St. Paul	15	27
PEORIA	133	6
St. Louis	99	32
South Bend	150	3
Toledo	62	10
Youngstown	35	10
Plants not in metropolitan areas	35	1114
All plants, combined	36	2252

Source: See Table 12

Table 17

Respondents' Opinions on Potentialities for Expansion of
Water Use in their Own Localities by Metropolitan Areas

Area	Percentage of Respondents Stating:		
	Water Sources Used at Capacity	A Few Additional Plants Possible	A Large No. Additional Plants Possible
Akron	0%	17%	33%
Canton	14	57	0
Chicago	4	15	16
Cincinnati	12	21	15
Cleveland	22	8	17
Columbus	14	29	21
Dayton	0	20	0
Detroit	9	0	28
Flint	0	0	33
Indianapolis	0	27	20
Kansas City	11	11	28
Louisville	0	18	27
Milwaukee	14	14	19
Minneapolis-St. Paul	3	20	15
PEORIA	43	43	0
St. Louis	5	5	20
South Bend	20	0	0
Toledo	0	18	36
Youngstown	40	50	0
Plants not in metropolitan areas	14	33	20
All plants, combined	12	25	19

Source: See Table 12

Table 17 (cont'd)

Area	Percentage of Respondents Stating:		
	An Unlimited No. of Additional Plants Possible	Respondent Doesn't Know	Number of Plants
Akron	17%	33%	6
Canton	0	28	7
Chicago	10	56	147
Cincinnati	0	53	34
Cleveland	12	41	59
Columbus	0	36	14
Dayton	0	80	10
Detroit	14	49	57
Flint	0	67	3
Indianapolis	0	53	15
Kansas City	17	33	18
Louisville	9	46	11
Milwaukee	14	39	57
Minneapolis-St. Paul	10	51	39
PEORIA	0	14	7
St. Louis	11	59	44
South Bend	0	80	5
Toledo	9	36	11
Youngstown	10	0	10
Plants not in metropolitan areas	5	28	1505
All plants, combined	6	39	3011

Source: See Table 12

Table 18

Respondents' Opinions on Status of Water Pollution in
their Own Localities by Metropolitan Areas

Percentage of Plants Stating that
Pollution in their Locality is:

Area	Serious	Moderate	Slight	Practically non- existent	No. of plants
Akron	17%	33%	17%	33%	6
Canton	12	38	12	38	8
Chicago	13	29	26	32	132
Cincinnati	40	51	3	6	35
Cleveland	31	42	16	11	64
Columbus	8	46	46	0	13
Dayton	11	56	22	11	9
Detroit	14	28	20	38	56
Flint	33	0	33	33	3
Indianapolis	24	41	6	29	17
Kansas City	6	37	6	50	16
Louisville	25	58	17	0	12
Milwaukee	0	12	31	56	57
Minneapolis-St. Paul	0	18	41	41	39
PEORIA	14	29	29	29	7
St. Louis	23	20	23	33	39
South Bend	66	33	0	0	3
Toledo	0	55	27	18	11
Youngstown	44	33	11	11	9
Plants not in metropolitan areas	12	28	28	32	1512
All plants, combined	17	30	25	29	2948

Source: See Table 12

Table 19

Respondents' Opinions on Trend in Status of Water Pollution
in their Own Localities by Metropolitan Areas

Area	Percentage of Respondents Stating that Pollution is:				Number of Plants
	Improving	Remaining Same	Growing Worse		
Akron	25%	75%	0%		4
Canton	25	62	12		8
Chicago	37	51	12		130
Cincinnati	53	26	21		34
Cleveland	28	40	33		58
Columbus	23	77	0		13
Dayton	50	40	10		10
Detroit	34	57	8		47
Flint	33	33	33		3
Indianapolis	33	40	27		15
Kansas City	40	47	13		15
Louisville	33	42	25		12
Milwaukee	16	82	2		55
Minneapolis-St. Paul	36	64	0		36
PEORIA	14	72	14		7
St. Louis	5	68	27		37
South Bend	33	67	0		3
Toledo	55	27	18		11
Youngstown	44	11	44		9
Plants not in metro- politan areas	28	60	12		1443
All plants, combined	33	55	12		2800

Source: See Table 12

Table 20

Average Percentage of Water Intake Which is Reused, by Industry

Industry	Average Percent	Number of Plants on which Average is Based
Apparel and textiles	14%	221
Autos and aircraft	25	96
Chemicals and drugs	35	200
Electrical	*	130
Foods, beverages, tobacco	22	330
Iron and steel	25	316
Leather	12	32
Lumber and furniture	23	118
Machinery and tools	15	461
Non-ferrous metals	18	123
Optical, medical, scientific	21	38
Paper and pulp	52	149
Petroleum products	98	42
Plastics	19	21
Stone and glass	25	191
Toys, novelties, sport goods	19	16
Misc. and unspecified	22	209
All plants, combined	24	2,693

* No average is computed for this industry because of the wide disparity among the several plants. The group includes 72 electrical generating stations of which 33 reuse some water, and 19 reuse their water twice or more. There were even 6 plants which reused their water at least 40 times.

Source: See Table 12

Table 21

Percentage of Plants Which Have Facilities for Treating Water, by Industry

Industry	Percentage of Plants Reporting Facilities for Treating Water
<hr/>	
Apparel and textiles	48%
Autos and aircraft	43
Chemicals and drugs	63
Electrical	50
Foods, beverages, tobacco	51
Iron and steel	38
Leather	36
Lumber and furniture	42
Machinery and tools	29
Non-ferrous metals	50
Optical, medical, scientific	34
Paper and pulp	57
Petroleum products	89
Plastics	64
Stone and glass	45
Toys, novelties, sport goods	35
Misc. and unspecified	42
All plants, combined	45

Source: See Table 12

Table 22

Average Percentage of Water Intake Which is Reused by Metropolitan Areas

Area	Average* Percent Reused	Number of Plants
Akron	2%	6
Canton	24	8
Chicago	23	139
Cincinnati	45	28
Cleveland	26	52
Columbus	40	11
Dayton	30	10
Detroit	14	51
Flint	0	3
Indianapolis	48	14
Kansas City	9	17
Louisville	55	10
Milwaukee	16	49
Minneapolis-St. Paul	10	35
Peoria	34	7
St. Louis	20	40
South Bend	62	4
Toledo	41	8
Youngstown	62	9
Plants not in metropolitan areas	25	1341
All plants, combined	24	2693

* The average is an arithmetic mean of the percentages for all plants in each area, including those which reuse no water at all.

Source: See Table 12

WATER SUPPLY

Table 23

Days river temperature is ° F. and below.

Degrees Fahrenheit		35	40	45	50	55	60
Cairo	Max.	65	111	135	157	194	227
	Min.	0	9	50	107	120	164
	Ave.	32.5	76.0	106.2	137	161.7	194
E. St. Louis	Max.	24	99	136	157	173	209
	Min.	0	55	98	114	134	172
	Ave.	4.3	81.6	119.8	133.3	157.3	185.
Alton	Max.	85	123	137	169	184	223
	Min.	36	91	110	120	140	176
	Ave.	65.5	104	126.9	146.7	167.9	193
Quincy	Max.	95	129	155	175	189	233
	Min.	23	82	115	135	158	183
	Ave.	60.2	112.6	136.6	161.1	177.8	203.3
Moline	Max.	128	147	165	184	207	234
	Min.	90	104	131	150	172	195
	Ave.	108.9	126.5	149.9	168.5	189.8	214.6
Peoria	Max.	91	132	148	174	195	236
	Min.	28	94	112	128	168	181
	Ave.	68.8	110.8	132.9	157.4	182.3	209.8
Missouri River, St. Louis Co.	Max.	64	108	139	157	183	218
	Min.	10	44	94	119	142	169
	Ave.	34.2	87	118.4	141.6	164.7	192

WATER SUPPLY

Table 23 (cont'd)

Days river temperature is ° F. and below

Degrees Fahrenheit		65	70	75	80	85	90
Cairo	Max.	243	286	308	364	365	366
	Min.	191	207	243	272	316	365
	Ave.	217.9	245.6	273.5	322.8	359.0	365.0
E. St. Louis	Max.	234	263	285	338	366	366
	Min.	204	231	243	292	337	365
	Ave.	216.3	242.8	261.1	306.7	355.4	365.2
Alton	Max.	242	272	286	346	366	366
	Min.	203	231	235	279	335	360
	Ave.	221.9	246.8	267.4	313.7	357.5	364.7
Quincy	Max.	260	283	304	353	366	366
	Min.	209	237	251	302	348	365
	Ave.	232.3	258.1	280.3	328.7	362.8	365.2
Moline	Max.	262	283	314	357	365	365
	Min.	221	240	276	321	356	362
	Ave.	240.8	263.1	295.7	340.1	362.6	364.7
Peoria	Max.	261	283	321	360	366	
	Min.	207	246	280	335	360	
	Ave.	236.1	264.2	298.5	344.5	364.2	
Missouri River, St. Louis Co.	Max.	242	275	288	341	366	366
	Min.	196	228	253	304	354	365
	Ave.	217.5	247.3	269.1	323.2	360.6	365.3

WATER SUPPLY

Table 24

Days Turbidity is ppm. and below.
(Parts Per Million)

Parts Per Million		25	50	75	100	200	300
Cairo	Max.	29	89	129	186	301	332
	Min.	0	0	0	4	142	193
	Ave.	5.0	17.4	51.2	104.5	210.1	255.5
E. St. Louis	Max.	43	94	209	252	320	340
	Min.	0	7	32	90	148	199
	Ave.	21.4	51.1	92.3	131.4	202.2	253.3
Alton	Max.	45	169	223	258	348	355
	Min.	0	2	22	76	153	207
	Ave.	21.2	60.2	97.6	141.5	248.9	296.3
Quincy	Max.	92	250	278	283	336	352
	Min.	0	51	64	87	179	245
	Ave.	27.4	120.2	161	197.4	264.4	299.7
Moline	Max.	141	194	239	291	354	359
	Min.	44	78	115	171	277	309
	Ave.	83.5	136.3	179.1	225.5	313	342.5
Peoria	Max.	191	305	332	343	356	365
	Min.	102	212	241	270	327	353
	Ave.	151.6	242.2	276.8	299.1	346.2	358.7
Missouri River, St. Louis Co.	Max.	13	36	39	42	63	72
	Min.	0	0	0	0	1	9
	Ave.	2.6	7.3	10.0	14.1	27.5	42.6

WATER SUPPLY

Table 24 (cont'd)

		<u>Days Turbidity is ppm. and below</u>				
Parts Per Million		400	500	600	700	
Cairo	Max.	345	357	365	366	
	Min.	241	286	308	317	1936-1945
	Ave.	289.1	312.4	326.1	334.9	incl.
E. St. Louis	Max.	348	352	356	359	
	Min.	233	256	275	289	1937-1945
	Ave.	289.7	309	322.2	331.7	incl.
Alton	Max.	359	360	362	366	
	Min.	258	296	309	315	1936-1945
	Ave.	320.3	335.8	344.1	348.6	incl.
Quincy	Max.	356	361	364	366	
	Min.	293	314	329	331	1929-1945
	Ave.	322.1	336.9	345.8	350.9	incl.
Moline	Max.	363	365	365	365	
	Min.	323	335	342	345	1935-1945
	Ave.	352.1	357.4	360	361.5	incl.
Peoria	Max.	366	366	366	366	
	Min.	357	359	363	363	1935-1944
	Ave.	363	364.3	365	365	incl.
Missouri River, St. Louis Co.	Max.	109	143	157	168	
	Min.	24	42	59	66	1935-1945
	Ave.	59.2	80.2	99.1	117	incl.

Source; Tables 1 and 2

"Temperature and Turbidity of Some River Waters in Illinois"; Max Suter; Issued by Dept. of Registration and Education, and State Water Survey Division, Urbana, Ill., 1948

CHAPTER IX

TRANSPORTATION FACILITIES

(AVAILABILITY AND COST)

TRANSPORTATION

The Peoria Association of Commerce has a traffic department directed by a qualified traffic manager. This report does not attempt to cover all rate schedules by commodity, due to the tremendous volume of such figures. As various industries inquire about rates on specific items, such rates can be supplied by the Association of Commerce traffic department. Only general rates are listed herein, which might be of general interest to all industries.

This section of the report includes information on railroads, airlines, and airports, busses, barge lines, postal service, highways and automobiles, and trucking firms. In general, all passenger and freight schedules are shown, as are maps, passenger rates, general freight rates, distances, delivery times, and certain other information.

It should be recognized that all schedules and rates contained herein are as of July, 1954, and are subject to change at any time.

LOCAL TRANSPORTATION

Peoria is served by a privately owned bus company, having routes as shown on Map A, page 247. The owner and operator is the Peoria Transit Lines, Inc., affiliated with a larger parent organization with headquarters outside of Peoria.

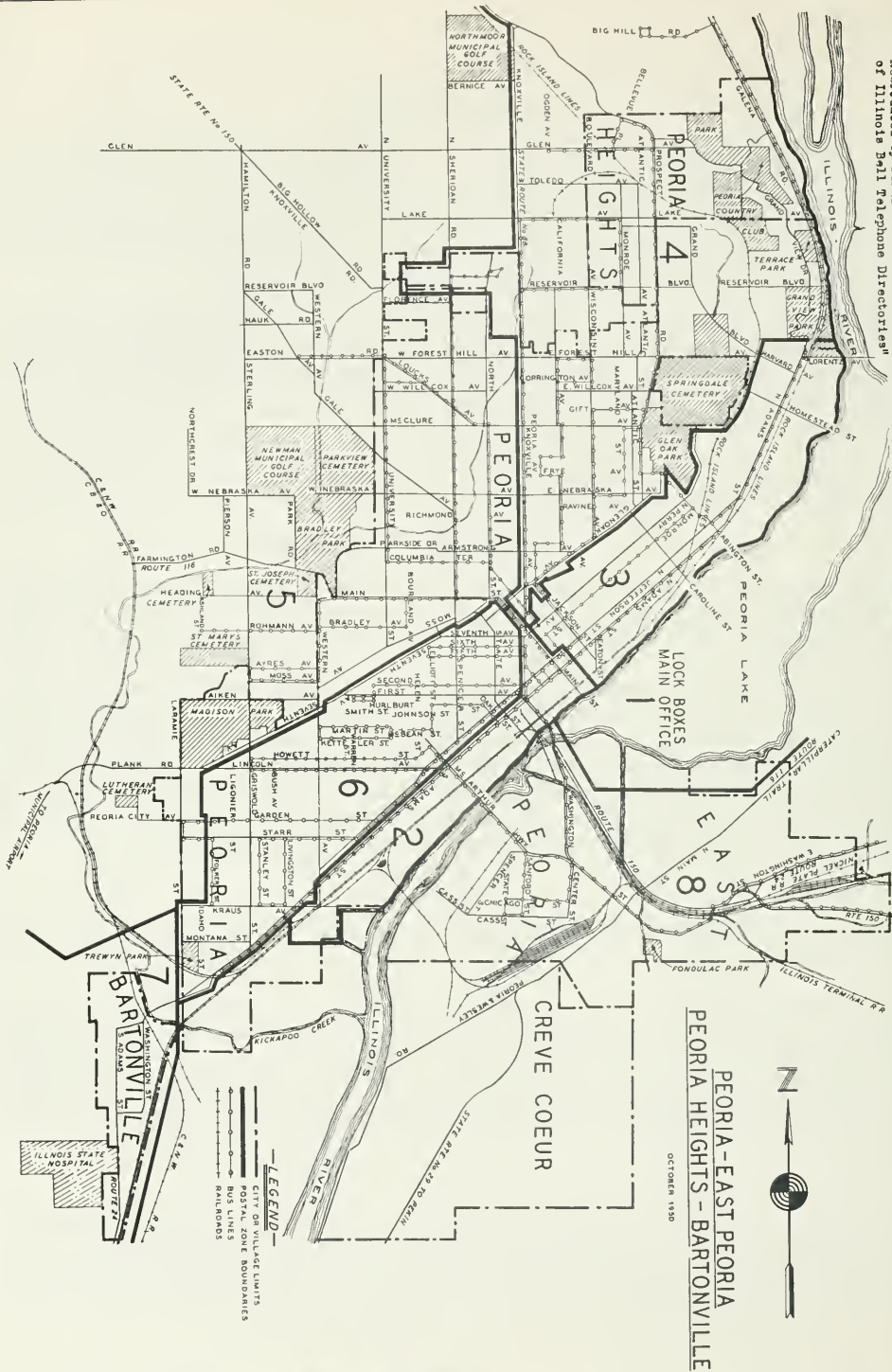
Since the war this company has been plagued with a decreasing quantity of customers, due no doubt to increased automobile sales. As revenue dropped the company increased rates and time between runs, dropping some routes altogether, causing more customers to drive cars. This has become a vicious circle - higher rates, fewer customers, less revenue - until at present the company is in serious financial straits, in debt to the city, and is being sued by the city. What the outcome will be is problematical, but it should result in better service.

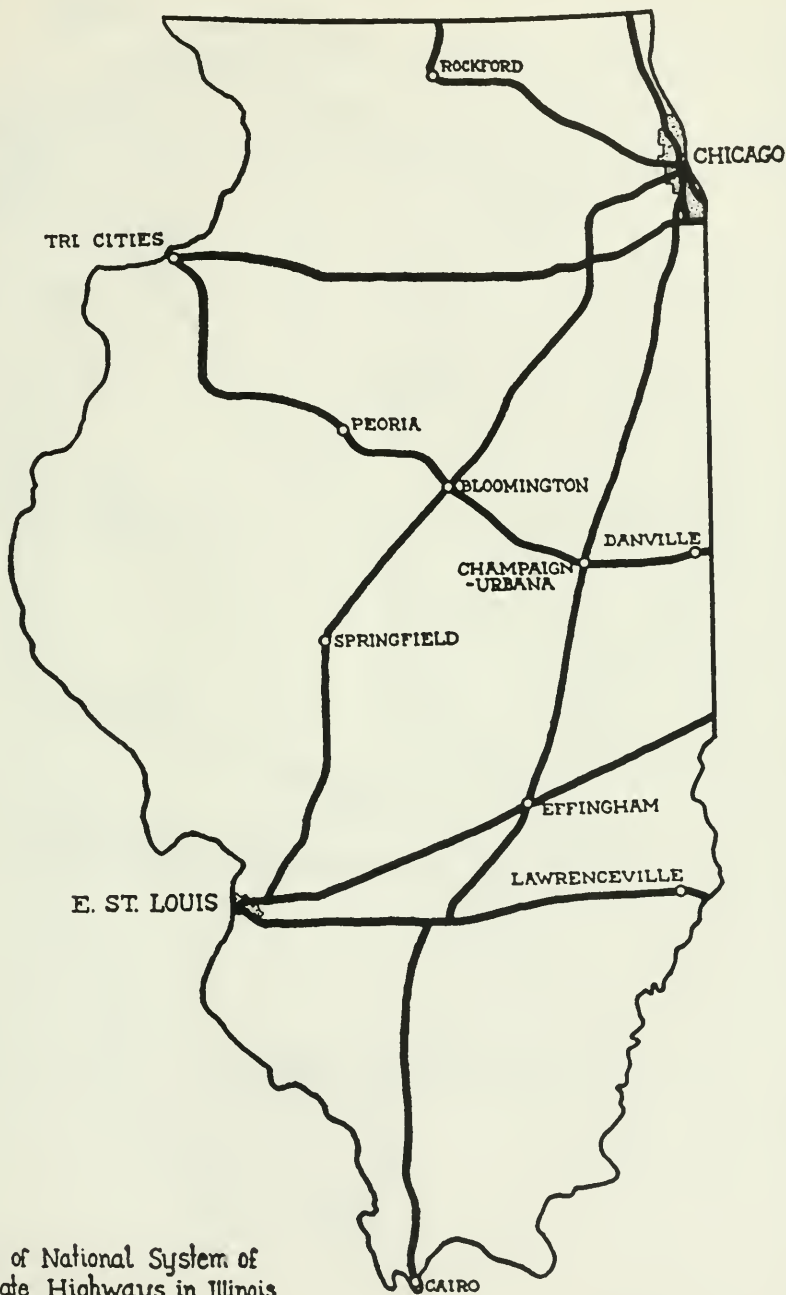
HIGHWAYS

Two U. S. highways and five state highways pass through Peoria, giving the city an excellent road net.

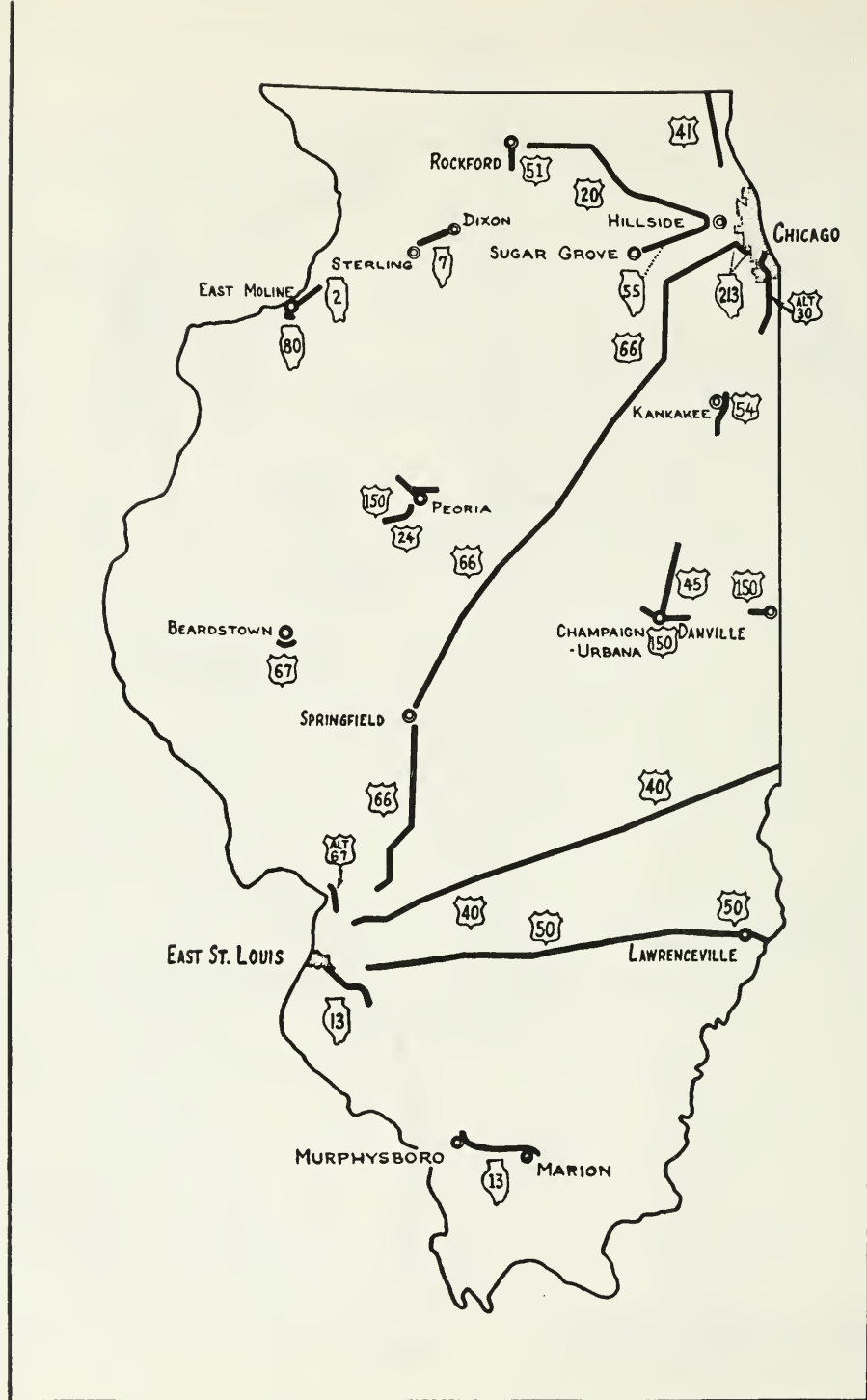
The Illinois River before World War II was crossed by two bridges at Peoria, and after the war another was built on the city's north side, providing a fast, four-lane by-pass of Peoria via U.S. Route 150. At present, plans have been completed, and contracts let, for the construction of a new four-lane bridge in downtown Peoria, with underground or overhead approaches on both sides of the river. This will greatly relieve the present traffic congestion between Peoria and East Peoria.

All major rail lines into Peoria are located so as not to interfere with highways and streets. Wherever crossings are necessary, they are accomplished by overpass or underpass. No major streets have grade crossings over any major railroads in Peoria, a condition unique among cities of Peoria's size. This is indeed a great advantage to traffic. See maps on pages 248 and 249.





Routes of National System of
Interstate Highways in Illinois



Location of highways designated as freeways.

HIGHWAY DISTANCES FROM PEORIA TO:

Akron, Ohio	452	Los Angeles, California	2078
Atlanta, Georgia	656	Louisville, Kentucky	327
Austin, Texas	1049	Mackinaw City, Michigan	540
Baltimore, Maryland	772	Memphis, Tennessee	465
Birmingham, Alabama	617	Mexico, D. F.	2020
Bismark, North Dakota	881	Miami, Florida	1330
Boise, Idaho	1666	Milwaukee, Wisconsin	226
Boston, Massachusetts	1109	Minneapolis-St. Paul, Minnesota	430
Buffalo, New York	652	Montgomery, Alabama	718
Carson City, Nevada	1892	Montreal, Quebec	992
Cheyenne, Wyoming	877	Nashville, Tennessee	399
Chicago, Illinois	158	New Orleans, Louisiana	875
Cincinnati, Ohio	324	New York, New York	920
Cleveland, Ohio	458	Oklahoma City, Oklahoma	725
Columbus, Ohio	389	Omaha, Nebraska	376
Columbia, South Carolina	836	Philadelphia, Pennsylvania	840
Dallas, Texas	850	Phoenix, Arizona	1658
Davenport, Iowa	101	Pierre, South Dakota	776
Denver, Colorado	931	Pittsburg, Pennsylvania	549
Des Moines, Iowa	256	Portland, Oregon	2132
Detroit, Michigan	405	Raleigh, North Carolina	878
Duluth, Minnesota	550	Richmond, Virginia	842
El Paso, Texas	1353	St. Louis, Missouri	175
Evansville, Indiana	261	Salt Lake City, Utah	1348
Ft. Wayne, Indiana	253	San Francisco, California	2106
Glacier National Park	1582	Sante Fe, New Mexico	1203
Grand Canyon, Arizona	1620	Seattle, Washington	2142
Harrisburg, Pennsylvania	751	Spokane, Washington	1852
Helena, Montana	1527	Springfield, Illinois	73
Houston, Texas	991	Springfield, Missouri	408
Indianapolis, Indiana	214	Tampa, Florida	1127
Jackson, Mississippi	678	Toledo, Ohio	362
Jacksonville, Florida	981	Topeka, Kansas	428
Jefferson City, Missouri	271	Tulsa, Oklahoma	605
Kansas City, Missouri	355	Washington, D. C.	781
Lansing, Michigan	344	Wichita, Kansas	582
Little Rock, Arkansas	539	Yellowstone National Park	1316

Table 1

A district headquarters of the Illinois Division of Highways is located just outside Peoria on State Route 88. State Police, maintenance equipment, and engineers are located there. Through their efforts the highways in the Peoria District have been greatly improved and are today in excellent shape.

Peoria, in recent years, has undertaken a major street repair campaign. All major streets have been either repaved, recovered, or are in the process of such repair.

Insofar as traffic accidents are concerned, the Peoria Metropolitan Area is safer than other comparable areas in Illinois. Referring to Table 4, page , noting the "% of total population" figures, the Peoria area had a lower percentage of total accidents, fatal accidents, persons killed, persons injured, and property damage accidents than either Rockford or the Moline, East Moline, Rock Island Area, in 1951. Traffic law enforcement has improved a great deal since 1951, primarily due to the city manager form of government in the City of Peoria, and the appointment by the City Manager of a full time qualified Traffic Engineer.

BUS TRANSPORTATION

Peoria is served by eight bus companies, four local and four national, which are listed below. These companies give frequent passenger service to all parts of the United States and, in addition, offer certain fast freight service to the cities they serve.

Most of these companies render a great service to Peoria area residents by transporting them from their country residences, at short distances out of the city, into Peoria proper. A local bus line could not economically offer this service.

BUS LINES SERVING PEORIA

Capitol Bus Lines
Continental American
Continental Trailways Bus Systems
Illini-Swallow Lines
Illinois Highway Transportation Company
Jacksonville Trailways
Peoria-Rockford Bus Company
White Star Motor Coach Lines

Charter service is also available via Peoria Charter Coach Company.

TRUCKING COMPANIES

Approximately 100 trucking firms serve Peoria area. Their scope of operations naturally covers the entire United States. As noted under the railroad section of this report, several railroads have working agreements with trucking firms in regard to shipments partly by truck and partly by rail, to give the fastest and most economical service. Rates vary according to commodity and quantity, and delivery times vary considerably between companies. See page 260 for Major Trucking Companies Serving Peoria

Percentage of the total state motor vehicle license fees, paid by residents of each county:

Peoria	2.45
Tazewell	<u>1.08</u>
Total	3.53
Winnebago (Rockford)	2.10
Rock Island (Moline-Rock Island)	1.82

Funds expended for the maintenance of city streets during the calendar year of 1951:

Peoria	\$ 10,048.71
Peoria Heights	502.56
Pekin	5,387.79
East Peoria	<u>1,377.17</u>
Total	\$ 17,316.33
Rockford	\$ 11,037.97
East Moline	\$ 689.92
Moline	4,921.23
Rock Island	<u>4,097.53</u>
Total	\$ 9,708.68

Source: Illinois Division of Highways

Table 2

Mileage of Rural Highways by type of surface - December 31, 1951

Highway System

<u>County</u>	PRIMARY			STATE AID		
	<u>Paved</u>	<u>Low Type Surface</u>	<u>Earth</u>	<u>Paved</u>	<u>Low</u>	<u>Earth</u>
Peoria	163	-	-	25	311	2
Tazewell	115	1	-	4	182	-
Total	278	1	-	29	493	2
Winnebago	91	-	-	71	225	-
Rock Island	99	-	-	45	130	2

LOCAL

	<u>Paved</u>	<u>Low Type Surface</u>	<u>Earth</u>	<u>Total Rural Mileage</u>
Peoria	5	525	104	1185
Tazewell	3	751	78	1134
Total	8	1326	182	2319
Winnebago	5	577	98	1067
Rock Island	1	385	83	745

Source: Illinois Division of Highways

Table 3

Reported traffic accidents in 1951, in cities of 5000 or more population:

	Total Acc.	Fatal Acc.	Persons Killed	Nonfatal Acc.	Persons Injured	Property Damage Acc.	Pop. 1950
Peoria	2283	8	8	584	764	1691	111,856
Pekin	294	1	1	64	103	167	21,858
Peoria Heights	29	-	-	9	14	20	5,425
East Peoria	472	1	1	102	151	369	8,698
Total	3078	10	10	759	1032	2247	147,837
% of total population	2.1	.07	.07	.5	.7	1.5	
Rockford	2327	9	9	622	866	1696	92,927
% of total population	2.5	.1	.1	.7	.9	1.8	
East Moline	298	1	1	77	110	220	13,913
Moline	911	5	6	202	277	704	37,397
Rock Island	1110	6	7	237	365	867	48,710
Total	2319	12	14	516	752	1791	100,020
% of total population	2.3	.1	.1	.5	.8	1.8	

Source: Illinois Division of Highways

Table 4

State-Aid Road Mileage, December 31, 1951

<u>County</u>	<u>Total Road Mileage</u>	<u>Permissible State-Aid Mileage</u>	<u>Designated State-Aid Mileage</u>
Peoria	1,185	358	349
Tazewell	1,134	283	232
Total	<u>2,319</u>	<u>641</u>	<u>581</u>
Winnebago	1,067	355	324
Rock Island	745	189	177

Table 5

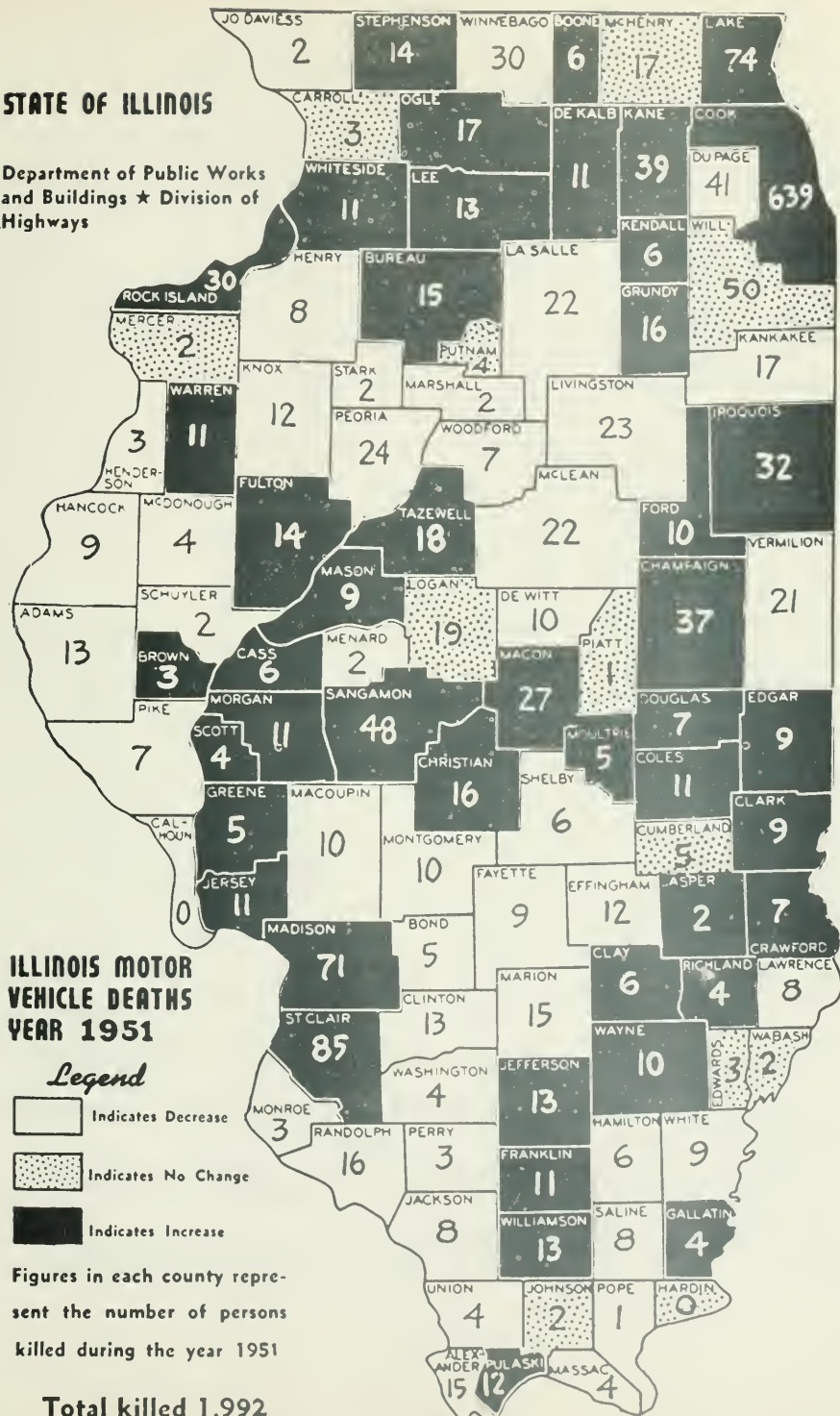
Motor Vehicle Registrations, 1953

	<u>Peoria Standard Metropolitan Area</u>	<u>State</u>	<u>% of State</u>
Passenger	84,588	2,566,907	3.30
Taxis	112	8,813	1.27
Trucks, busses	12,195	373,852	3.26
Trailers, semi-trailers	2,772	72,402	3.83
Motorcycles	1,157	23,631	4.90
Dealers' Cars	313	7,424	4.22
Total	<u>101,137</u>	<u>3,053,029</u>	<u>3.31</u>

Table 6

Source: Illinois Division of Highways

**Department of Public Works
and Buildings ★ Division of
Highways**



DAILY BUS SCHEDULES FROM PEORIA

From Peoria To:

<u>Destination</u>	<u>Bus Company</u>	<u>No. Trips Daily</u>
Bloomington, Illinois	ISL *	1
Champaign, Illinois	ISL	1 (Sunday only)
Chicago, Illinois	CT **	6
Danville, Illinois	ISL	2
Decatur, Illinois	ISL	4
Denver, Colorado	CT	1
Des Moines, Iowa	ISL	1
Des Moines, Iowa	CT	2
Indianapolis, Indiana	ISL	5
Kansas City, Missouri	CT	6
Milwaukee, Wisconsin	CT	2
Morton, Illinois	ISL	8
Omaha, Nebraska	ISL	6
Rockford, Illinois	PR ***	2
St. Louis, Missouri	JBL ****	3

To Peoria From:

<u>City</u>	<u>Bus Company</u>	<u>No. Trips Daily</u>
Bloomington, Illinois	ISL	3 (2FSS)*****
Chicago, Illinois	CT	6
Danville, Illinois	ISL	2
Davenport, Iowa	ISL	1
Decatur, Illinois	ISL	4
Denver, Colorado	CT	1
Des Moines, Iowa	ISL	1
Des Moines, Iowa	CT	2
Galesburg, Illinois	ISL	1
Indianapolis, Indiana	ISL	5
Kansas City, Missouri	CT	6
Milwaukee, Wisconsin	CT	3
Morton, Illinois	ISL	8
Omaha, Nebraska	ISL	4
Rockford, Illinois	PR	1
St. Louis, Missouri	JBL	3

- * Illini Swallow Lines (estimated passengers: 7500-10,000 arrive and depart per month)
- ** Continental Trailways (estimated passengers: 3322 arrive per month; 3462 depart per month)
- *** Peoria-Rockford Bus Company
- **** Jacksonville Bus Line Company (estimated passengers: 100 arrive per week; 65 depart per week)
- ***** FSS - Friday, Saturday, and Sunday only.
- Local Lines: Illinois Highway Transportation Company, White Star Motor Coach Lines.

Table 7

ONE-WAY BUS FARES TO MAJOR MIDWEST CITIES
(Less Federal Tax)

Akron, Ohio	\$11.20	
Birmingham, Alabama	12.45	
Charleston, South Carolina	20.15	
Chattanooga, Tennessee	12.45	
Chicago, Illinois	3.05	-- (Round Trip Excursion-
Cincinnati, Ohio	7.90	\$3.95)
Cleveland, Ohio	10.65	
Columbus, Ohio	9.35	
Davenport, Iowa	2.35	
Dayton, Ohio	7.75	
Denver, Colorado	19.40	
Des Moines, Iowa	6.20	
Detroit, Michigan	9.50	
Duluth, Minnesota	12.80	
Evansville, Indiana	6.50	
Grand Rapids, Michigan	7.30	
Indianapolis, Indiana	5.20	
Kansas City, Kansas	6.95	
Knoxville, Tennessee	12.45	
Little Rock, Arkansas	11.60	
Louisville, Kentucky	8.00	
Madison, Wisconsin	4.75	
Memphis, Tennessee	9.50	
Milwaukee, Wisconsin	4.75	
Minneapolis, Minnesota	9.55	
Nashville, Tennessee	9.90	
Oklahoma City, Oklahoma	13.95	
Omaha, Nebraska	8.75	
Pittsburgh, Pennsylvania	13.20	
Rockford, Illinois	3.15	
Springfield, Missouri	8.90	
St. Louis, Missouri	3.45	
Terre Haute, Indiana	4.45	
Toledo, Ohio	8.30	
Topeka, Kansas	8.50	
Toronto, Canada	15.85	
Tulsa, Oklahoma	11.95	
Wichita, Kansas	11.90	
Youngstown, Ohio	12.10	

Table 8

MAJOR TRUCKING COMPANIES SERVING PEORIA

1. Burlington Truck Lines, Inc.
2. C & D Motor Delivery Company
3. Central Transfer Company
4. Decatur Cartage Company
5. Dohrn Transfer Company
6. Great American Transport, Inc.
7. Hall Freight Lines
8. Hayes Freight Lines, Inc.
9. Inter-State Motor Freight System
10. Keeshin Motor Express Company
11. Kimbel Lines, Inc.
12. Knox Motor Service, Inc.
13. Koch Transfer Company
14. Melvin Trucking Company
15. Motor Cargo, Inc.
16. Peoria Cartage Company
17. Riss Truck Lines
18. Scherer Freight Lines, Inc.
19. Spector Motor Service, Inc.
20. Sturm Freightways
21. Transamerican Freight Lines, Inc.
22. Watson Brothers Transportatation Company, Inc.

RAILROADS

Peoria is fortunate to be served by fifteen railroads, nine of them major trunk lines. (See list, page 262, and railroad maps in this Chapter.) To the south are the Gulf, Mobile, and Ohio, and the Illinois Central; to the west, the Chicago, Burlington, and Quincy, the Chicago and Northwestern, and the Rock Island Lines; to the east, the New York Central, the New York, Chicago and St. Louis, and the Pennsylvania; and to the north, most of the railroads already mentioned.

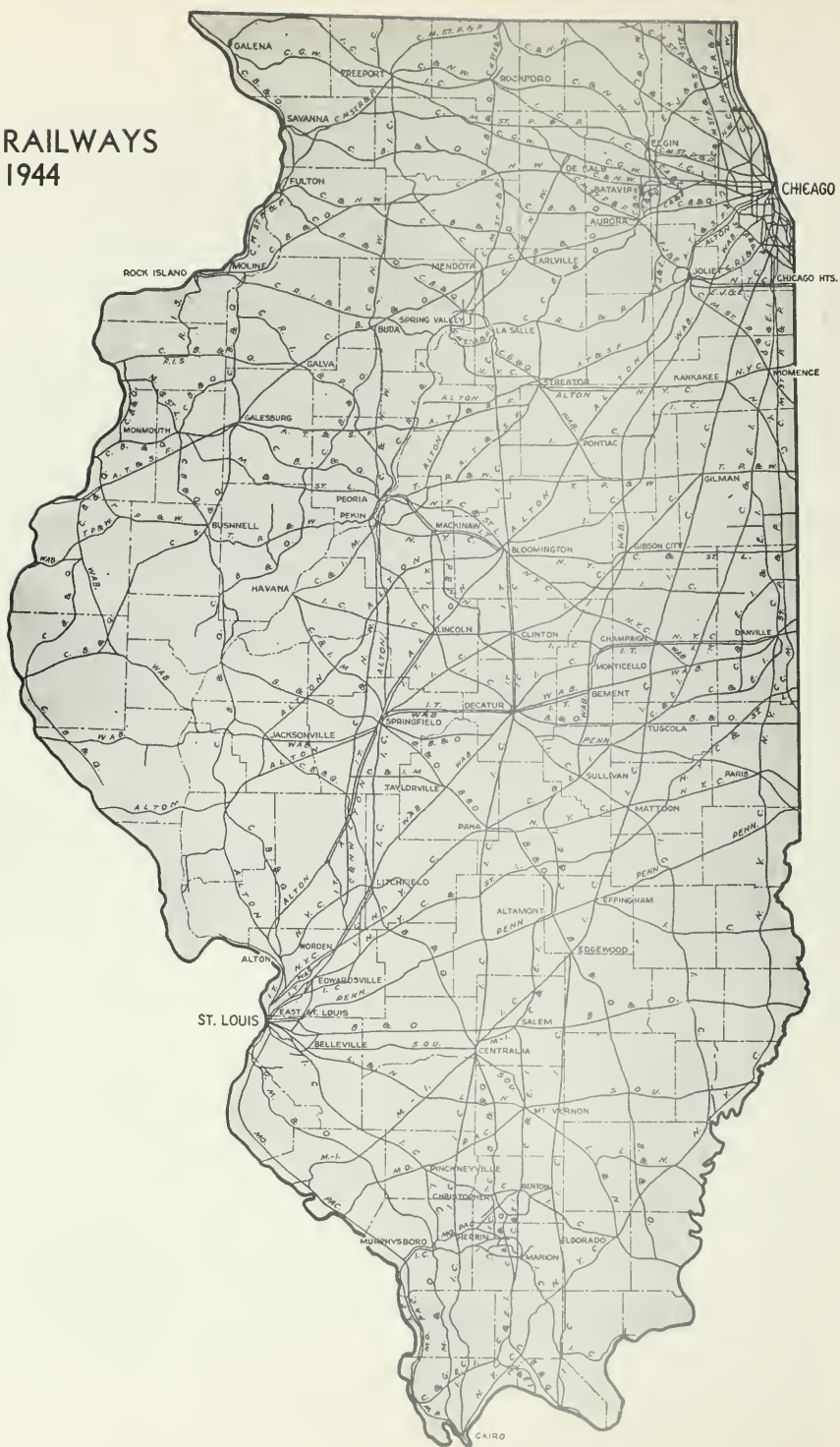
Peoria has the unique distinction of being one of the three transfer points between the East and West, the other two being Chicago and St. Louis. However, Peoria is not hampered by the excessive traffic delays of the other two cities. In almost all cases, shipments are forwarded the same day they arrive; and many times transfers take less than one hour.

All railroads entering Peoria interchange with each other. Many use the same terminal facilities, operated by the Peoria and Pekin Union Railway Company. Obviously this does much to speed up deliveries upon arrival of a train in Peoria.

Much has been made of the fact that most railroads end in Peoria, that we have no through major railroad. While this is true, it certainly is no disadvantage to Peoria area industries; in fact, if anything, it is an advantage. Peoria industries are concerned with shipping from Peoria and receiving goods in Peoria, not with having goods shipped through Peoria.

Peoria geographically, for rate making purposes, is located in Illinois Freight Association, Western Trunk Line, and Central Freight Association territory. Western classification and Western Trunk Line rates are used on west bound traffic and official classification - Central Freight Association Trunk Line and New England rates are used for east bound traffic. At times this reflects a distinct advantage in the rate level.

RAILWAYS 1944



RAILROADS SERVING THE PEORIA AREA

Atchinson-Topeka & Santa Fe
(via Peoria & Pekin Union Railroad) Jefferson Building

Chicago, Burlington & Quincy Railroad
301 South Jefferson Avenue

Chicago & Illinois Midland Railway Company
Commercial National Bank Building

Chicago & Northwestern Railway System
Jefferson Building

Gulf, Mobile & Ohio Railroad Company
Lehmann Building

Illinois Central Railroad Company
Commercial National Bank Building

Illinois Terminal Railroad Company
1167 West Washington, East Peoria

Minneapolis & St. Louis Railroad Company
Commercial National Bank Building

New York Central System
Commercial National Bank Building

New York, Chicago & St. Louis
(Nickel Plate Road) Commercial National Bank Building

Pennsylvania Railroad
Jefferson Building

Peoria & Pekin Union Railway Company
41 East State Street

Peoria Terminal Railroad
Foot of Liberty Street

Rock Island Lines
Foot of Liberty Street

Toledo, Peoria & Western Railroad
200 East Washington, East Peoria

RAILROAD SHORT LINE MILEAGES

<u>Peoria, Illinois, to:</u>	<u>Miles</u>
Akron, Ohio	442
Birmingham, Alabama	606
Charleston, South Carolina	1002
Chattanooga, Tennessee	557
Chicago, Illinois	146
Cincinnati, Ohio	313
Cleveland, Ohio	431
Columbus, Ohio	370
Davenport, Iowa	91
Dayton, Ohio	313
Denver, Colorado	906
Des Moines, Iowa	249
Detroit, Michigan	382
Duluth, Minnesota	514
Evansville, Indiana	247
Grand Rapids, Michigan	298
Indianapolis, Indiana	204
Kansas City, Kansas	323
Knoxville, Tennessee	584
Little Rock, Arkansas	495
Louisville, Kentucky	312
Madison, Wisconsin	189
Memphis, Tennessee	475
Milwaukee, Wisconsin	217
Minneapolis, Minnesota	407
Nashville, Tennessee	405
Oklahoma City, Oklahoma	658
Omaha, Nebraska	377
Pittsburgh, Pennsylvania	553
Rockford, Illinois	125
Springfield, Missouri	421
St. Louis, Missouri	152
Terre Haute, Indiana	169
Toledo, Ohio	336
Topeka, Kansas	388
Toronto, Ontario, Canada	607
Tulsa, Oklahoma	551
Wichita, Kansas	522
Youngstown, Ohio	493

Table 9

PEORIA RAIL CARLOADINGS - 1954

	<u>Inbound</u>	<u>Outbound</u>
January	6,546	4,882
February	6,470	4,420
March	7,853	5,357
April	7,253	5,629
May	7,064	6,073
June	6,897	5,726
July	6,512	5,021
August	7,863	6,275
September	7,348	6,533
October	7,764	5,808
November	8,656	5,145
December	7,728	4,943
	<hr/>	<hr/>
Total	87,954	65,812

Source: Peoria Association of Commerce

Table 10

FREIGHT AND PASSENGER SCHEDULES

ILLINOIS CENTRAL RAILROAD:

Freight Schedule:

leave Peoria	7:00 a. m.	11:00 p. m.
Average one unscheduled train per day.		

No Passenger Service

See Map 1, page 266.

NEW YORK CENTRAL RAILROAD:

Freight Schedule:

leave Peoria	9:00 a. m.	5:30 p. m.
arrive Indianapolis	9:00 p. m.	3:45 a. m.
leave Indianapolis	5:45 p. m.	
arrive Peoria	6:30 a. m.	

Passenger Service:

leave Peoria	2:15 p. m.
arrive Indianapolis	7:50 p. m.
leave Indianapolis	7:15 a. m.
arrive Peoria	1:25 p. m.

Fare: (less tax)	
One way	\$7.18
Round trip	\$14.36

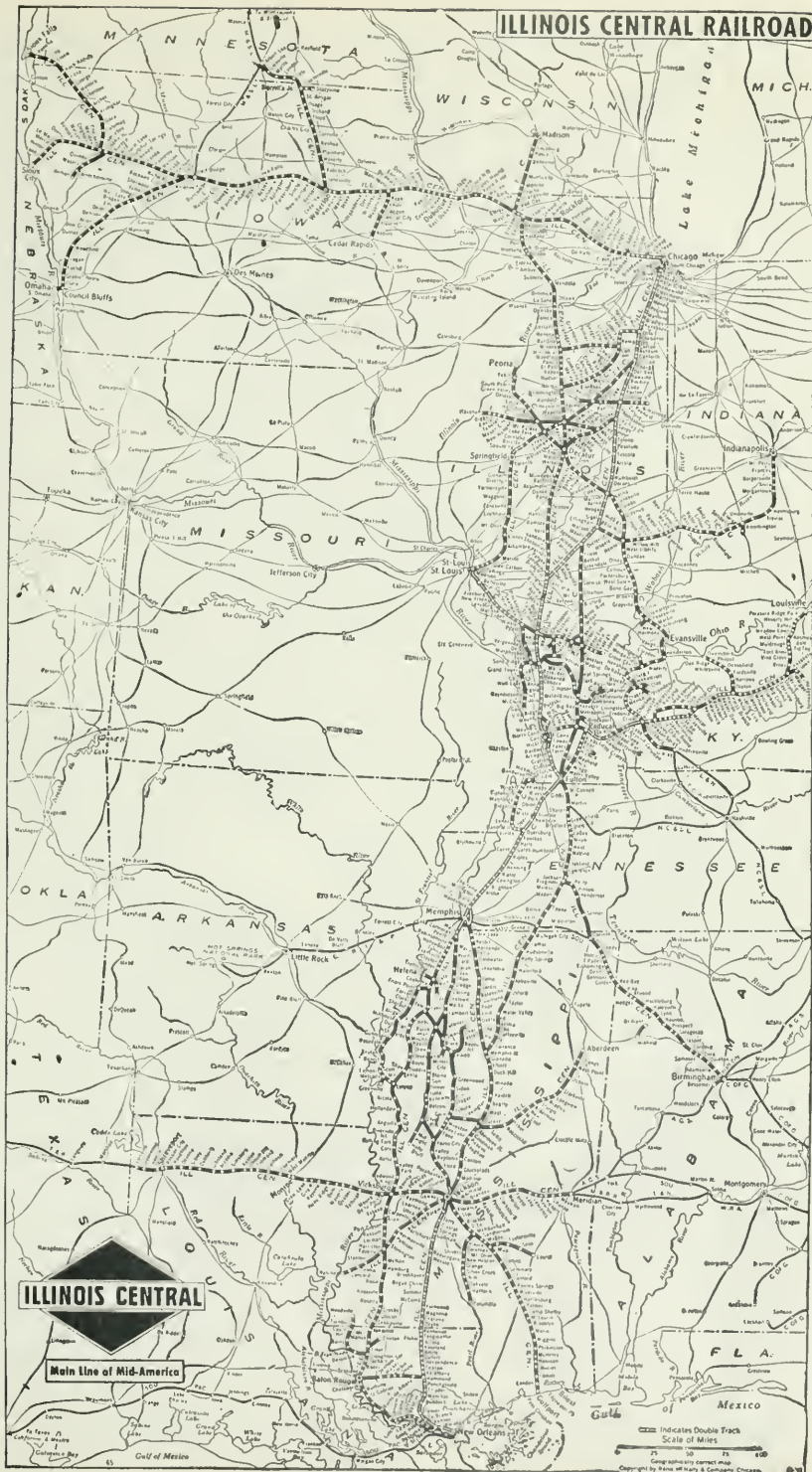
See Map 2, page 267.

CHICAGO, ROCK ISLAND & PACIFIC RAILROAD:

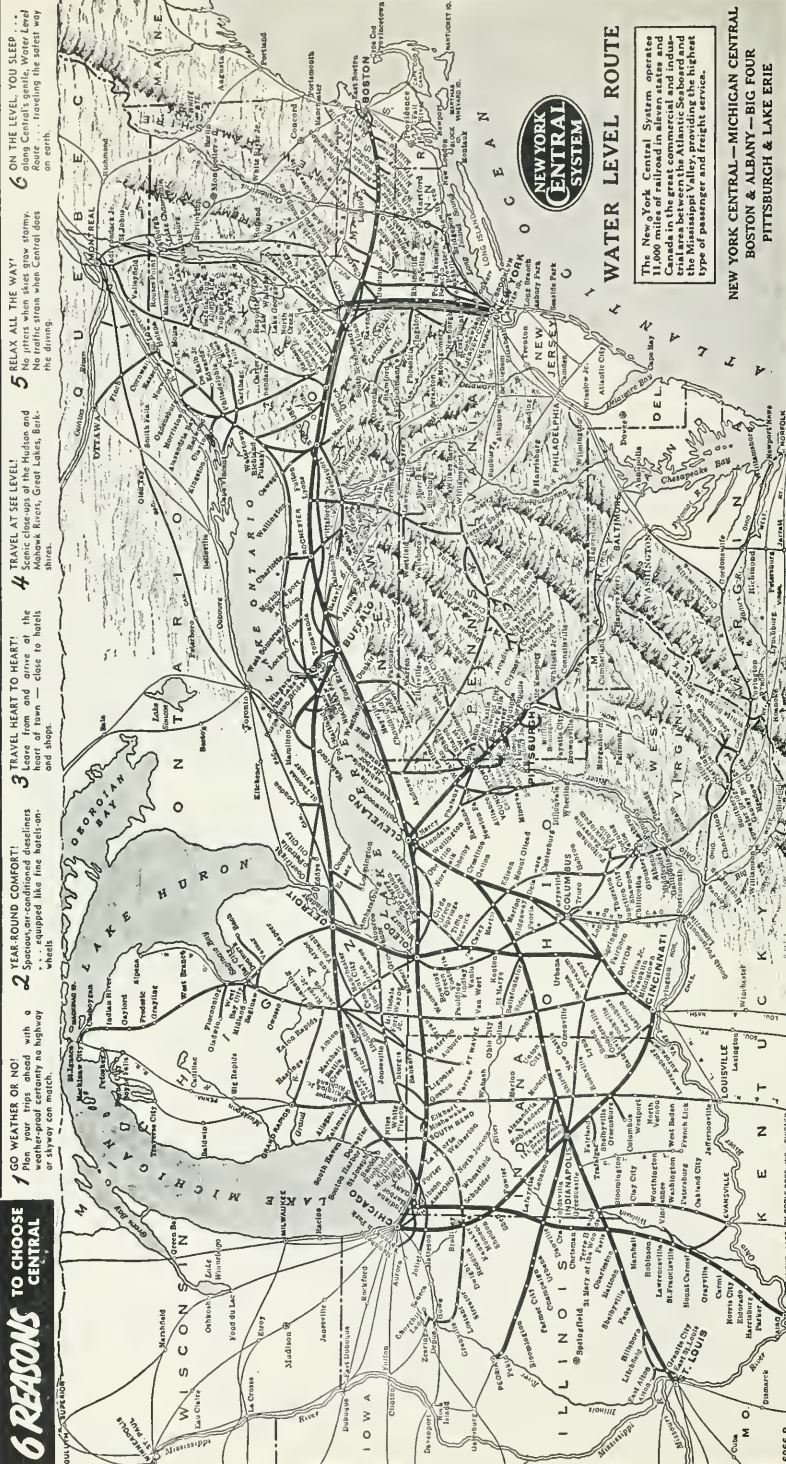
Freight Schedule:

Day of Week

leave Peoria for:	
California	6th a. m.
Kansas City	2nd a. m.
Fort Worth and Dallas	3rd a. m.
Houston	4th a. m.
Denver	3rd a. m.
Omaha	2nd a. m.



6 REASONS TO CHOOSE CENTRAL



- 1 GO WEATHER OR NO!**
Plan your trips ahead with a weatherproof itinerary no highway or railroad can match.
- 2 SPACIOUS, air-conditioned discomforts**
... equipped like fine hotel-amenities.
- 3 TRAVEL HEART TO HEART!**
Leave from and arrive at the heart of town — close to hotels and shops.
- 4 TRAVEL AT SEE LEVEL!**
Scenic close-ups of the Hudson and Mohawk Rivers, Great Lakes, Berkshires.
- 5 RELAX ALL THE WAY!**
No jitters when skies grow stormy. No traffic stream when Central does its thing.
- 6 ON THE LEVEL, YOU SLEEP ...**
along Central's gentle, Water Level Route ... traveling the safest way.



WATER LEVEL ROUTE

The New York Central System operates 12,000 miles of railroad in eleven states and the District of Columbia. The Water Level Route is the shortest and most scenic route between the Atlantic Seaboard and the Mississippi Valley, providing the highest type of passenger and freight service.

**NEW YORK CENTRAL — MICHIGAN CENTRAL
BOSTON & ALBANY — BIG FOUR
PITTSBURGH & LAKE ERIE**

CHICAGO, ROCK ISLAND & PACIFIC RAILROAD: (continued)

	<u>Day of Week</u>	
Des Moines	1st p. m.	
Rock Island	1st a. m.	
Minneapolis-St. Paul	2nd a. m.	
Chicago	1st a. m.	
arrive Peoria from:		
California	6th a. m.	
Kansas City	1st a. m.	
Fort Worth & Dallas	3rd a. m.	
Houston	4th a. m.	
Denver	3rd a. m.	
Omaha	1st a. m.	
Des Moines	1st a. m.	
Rock Island	1st a. m.	
Minneapolis-St. Paul	2nd a. m.	
Chicago	1st a. m.	

Passenger Schedule:

leave Peoria	7:00 a. m.	3:00 p. m.
arrive Chicago	9:40 a. m.	5:45 p. m.
leave Chicago	10:35 a. m.	7:00 p. m.
arrive Peoria	1:10 p. m.	9:40 p. m.
Fare. (less tax)		
One way	\$3.77	
Round trip	\$6.80	

(following times involve changing trains at Bureau)

leave Peoria	3:00 p. m.	8:45 p. m.
arrive Omaha	10:51 p. m.	7:55 a. m.
leave Omaha	11:52 p. m.	11:30 a. m.
arrive Peoria	8:40 a. m.	8:15 p. m.
leave Peoria	5:00 p. m.	12:01 a. m.
arrive Des Moines	11:40 p. m.	1:00 p. m.
leave Des Moines	8:00 p. m.	7:15 a. m.
arrive Peoria	5:50 a. m.	1:15 p. m.

CHICAGO, ROCK ISLAND & PACIFIC RAILROAD: (continued)

leave Peoria	5:00 p. m.	12:01 a. m.	9:45 a. m.
arrive Chicago	8:30 p. m.	5:00 a. m.	1:15 p. m.
leave Chicago	5:00 p. m.	1:00 a. m.	9:00 a. m.
arrive Peoria	8:15 p. m.	5:50 a. m.	1:15 p. m.
leave Peoria	8:45 p. m.		
arrive Kansas City	7:30 a. m.		
leave Kansas City	1:50 a. m.	7:00 p. m.	
arrive Peoria	1:15 p. m.	8:40 a. m.	

See Map 3, page 270.

CHICAGO & ILLINOIS MIDLAND RAILWAY COMPANY:

Freight Schedule:

leave Peoria	11:30 a. m. daily
	11:30 p. m. daily
	7:00 a. m. Tuesday, Thursday, Saturday

No passenger service

See Map 4, page 271.

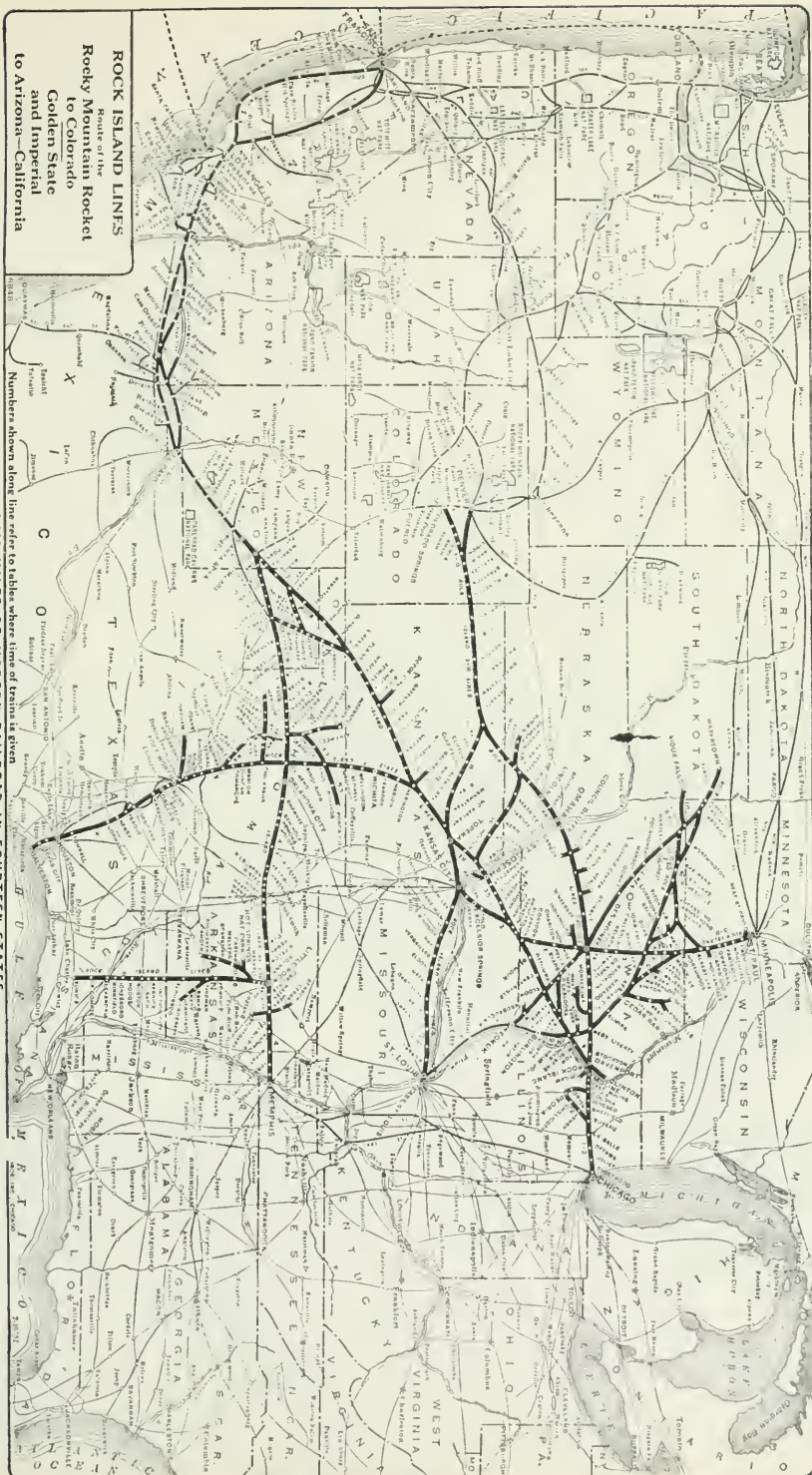
NEW YORK, CHICAGO & ST. LOUIS (NICKEL PLATE ROAD):

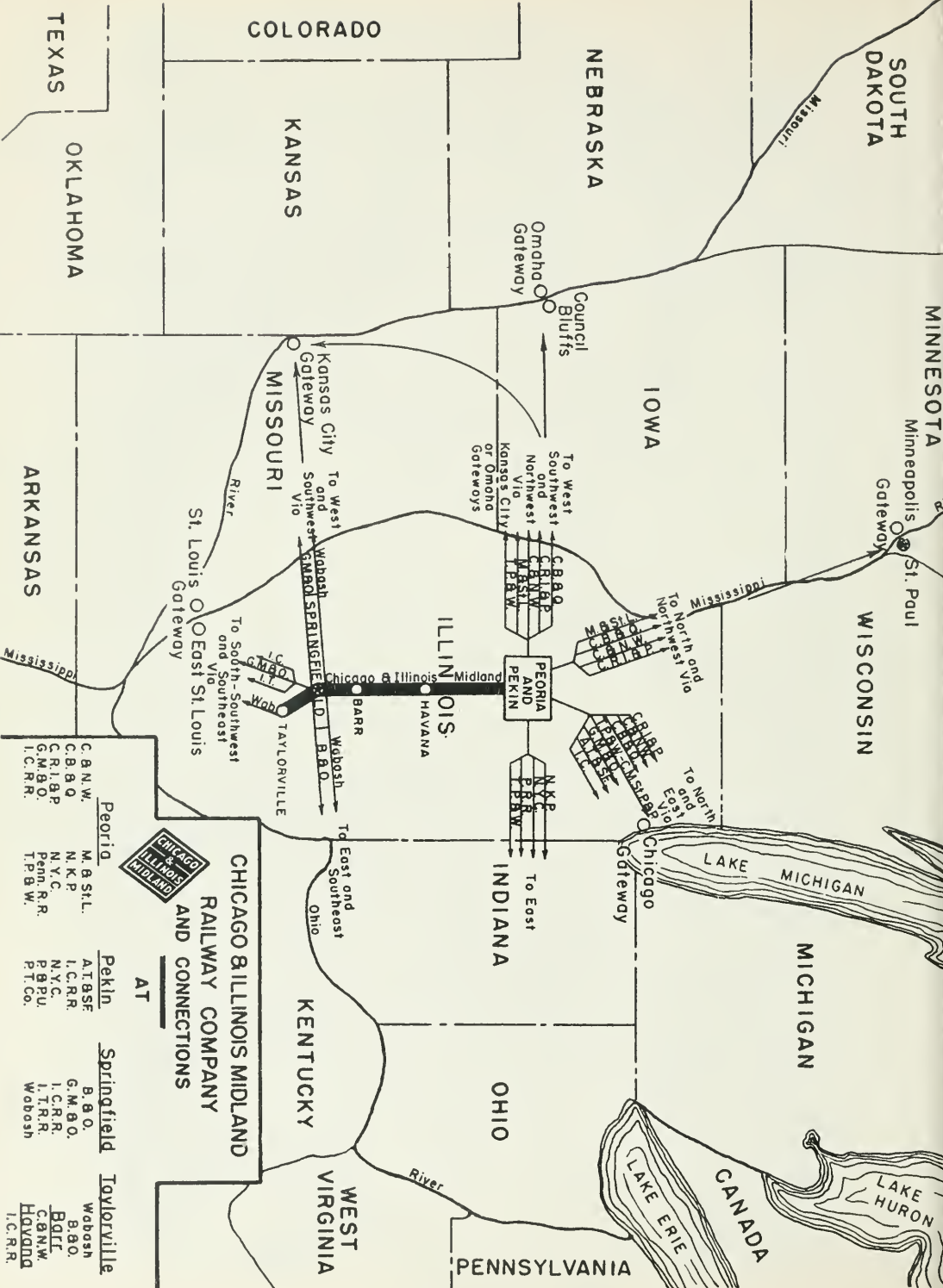
Freight Schedule:

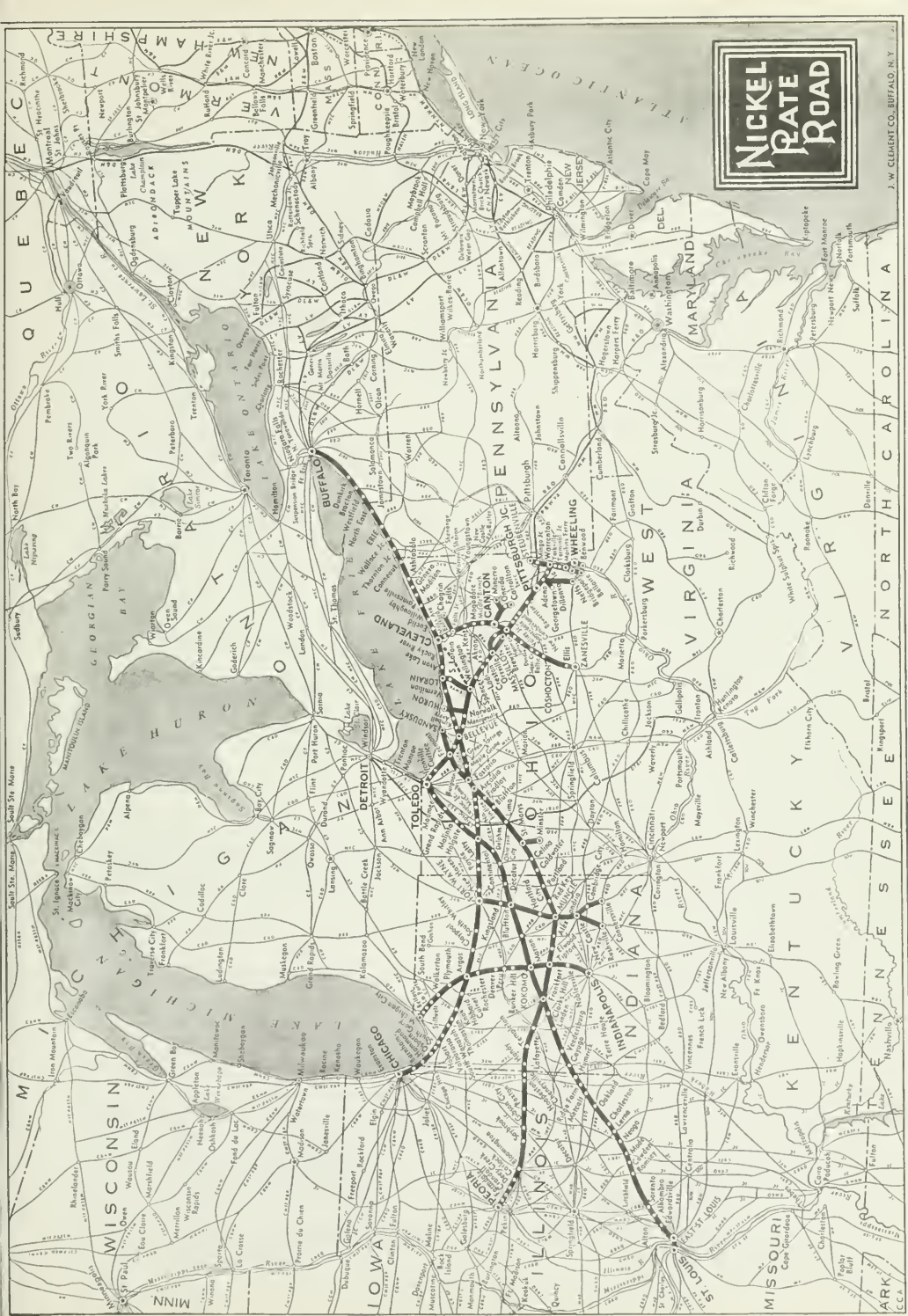
leave Peoria (train PB-12)	2:30 a. m.
arrive Buffalo	4:00 a. m. (following day)
leave Peoria (train KB-2)	11:30 a. m.
arrive Buffalo	3:30 p. m. (following day)
leave Peoria (train PB-6)	7:30 p. m.
arrive Buffalo	12:30 a. m. (second day)

No passenger service

See Map 5, page 272.







NICKEL
RATE
ROAD



CHICAGO & NORTHWESTERN RAILWAY SYSTEM:

Freight Schedule:

leave St. Louis (train #380)	2:30 a. m.
arrive Peoria	12:00 p. m.
leave Peoria	1:00 p. m.
arrive Chicago	6:30 p. m.
leave St. Louis (train #386)	12:45 p. m.
arrive Peoria	9:00 p. m.
leave Peoria	10:00 p. m.
arrive Chicago	5:30 a. m.
leave Chicago (train #381)	10:00 a. m.
arrive Peoria	5:05 p. m.
leave Peoria	5:30 p. m.
arrive St. Louis	1:30 a. m.
leave Chicago (train #383)	9:30 p. m.
arrive Peoria	3:55 a. m.
leave Peoria	4:30 a. m.
arrive St. Louis	11:45 a. m.

No passenger service

See Map 6, page 274.

CHICAGO, BURLINGTON & QUINCY RAILROAD COMPANY: COLORADO & SOUTHERN RAILROAD COMPANY: FORT WORTH & DENVER RAILROAD COMPANY:

Freight Schedule:

leave Peoria (#75)	11:45 p. m.
(#91)	11:00 a. m.
arrive Peoria (#68)	10:15 p. m.
(#70)	9:15 a. m.

Passenger Schedule:

leave Peoria (#1)	8:00 p. m.
arrive Galesburg	9:30 p. m.
leave Galesburg (#56)	5:20 a. m.
arrive Peoria	7:00 a. m.



CHICAGO, BURLINGTON & QUINCY RAILROAD COMPANY:
COLORADO & SOUTHERN RAILROAD COMPANY: (continued)
FORT WORTH & DENVER RAILROAD COMPANY:

(also three busses per day between Peoria & Galesburg)

Fare: (less tax)	
One way	\$1.34
Round Trip	\$2.45

Consolidated rail-truck service has been established by the Chicago, Burlington & Quincy Railroad Company and the Burlington Truck Lines, Inc. The new improved service will provide overnight service between Chicago and Peoria, and overnight service to various Illinois destinations.

Under this arrangement less than carload rail shipments formerly handled in box car service will now be handled over the highway by the Burlington Truck Lines between Peoria and important railroad transfer stations such as Chicago and Galesburg.

See Map 7, page 276

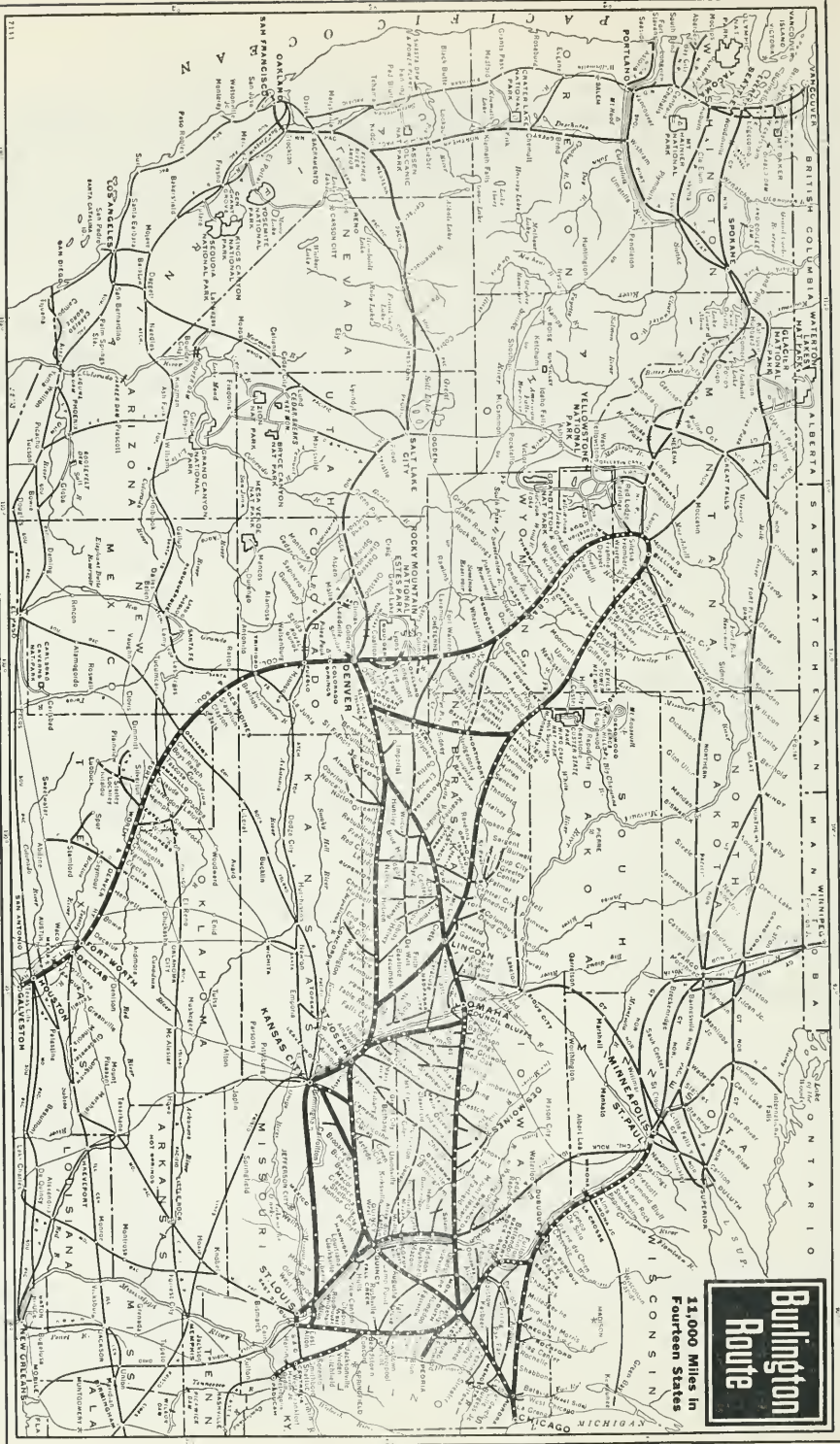
THE PENNSYLVANIA RAILROAD:

Freight Schedule:

leave Indianapolis	9:00 p. m.
arrive Peoria	1:30 p. m. (next day)
leave Peoria	4:00 p. m.
arrive Harrisburg, Pennsylvania	6:00 p. m. (second day)

No passenger service.

See Map 9, page 278.



Burlington
Route

13,000 Miles in
Fourteen States

TOLEDO, PEORIA & WESTERN RAILROAD COMPANY:

Carload Freight Schedules:

WESTBOUND (Read down)				TP&W	EASTBOUND (Read up)			
No.	No.	No.	No.	JUNCTION POINTS	No.	No.	No.	
*25	x103	*21-121	*23-123	WITH CONNECTING LINES	*122-22	*120-20	#104	*24
8:00P		8:15A	4:15P	Lv Effner (PRR)	Ar	4:00P	6:30A	8:45A
8:05P		8:20A	4:20P	Lv Sheldon(NYC) (C)	Lv	2:32P	4:32A	8:32A
8:10P		8:25A	4:25P	Lv Webster (CMST. P&P)	Lv	2:25P	4:25A	8:25A
8:19P		8:34A	4:34P	Lv Watseka (C&EI)	Lv	2:16P	4:16A	8:16A
8:37P		8:52A	4:52P	Lv Gilman (IC)	Lv	1:58P	3:58A	7:58A
9:04P		9:19A	5:19P	Lv Forrest (WAB)	Lv	1:30P	3:30A	7:30A
9:11P		9:26A	5:26P	Lv Fairbury (WAB)	Lv	1:23P	3:23A	7:23A
9:25P		9:40A	5:40P	Lv Chenoa (GM&O)	Lv	1:09P	3:09A	7:09A
9:45P		10:00A	6:00P	Lv El Paso (IC)	Lv	12:49P	2:49A	6:49A
10:03P		10:18A	6:18P	Lv Eureka (AT&SF)	Lv	12:31P	2:31A	6:31A
10:14P		(Note 2)			(Note 2)			
10:33P		10:48A	6:48P	Ar Peoria (Note 1)	Lv	12:01P	2:00A	6:00A
	6:00A	1:00P	9:30P	Lv Peoria (Note 1)	Ar	8:40A	9:57P	9:25A
	6:37A	1:37P	10:07P	Lv Hollis (PT)	Lv	8:05A	9:22P	8:50A
	7:08A	2:08P	10:38P	Lv Canton (CB&Q)	Lv	7:34A	8:51P	8:19A
	7:21A	2:21P	10:51P	Lv Cuba (CB&Q)	Lv	7:21A	8:38P	8:06A
	7:53A	2:53P	11:23P	Lv Bushnell (CB&Q)	Lv	6:48A	8:05P	7:33A
	8:26A	3:26P	11:56P	Ar LaHarpe	Lv	6:15A	7:32P	7:00A
		3:26P	4:30A	Lv LaHarpe	Ar	6:03A		
		3:44P	4:48A	Ar Lomax (AT&SF)	Lv	5:45A		
	8:45A		12:15A	Lv Ferris (CB&Q)	Lv	7:14P	6:41A	
	8:54A		12:24A	Lv Elvaston (WAB)	Lv	7:05P	6:32A	
	9:04A		12:34A	Lv Hamilton (WAB)	Lv	6:55P	6:22A	
	9:14A		12:44A	Ar Keokuk(CB&Q, CRI&P, WAB)	Lv	6:45P	6:12A	
*No. 101								*No. 102
4:00P				Lv Hamilton (WAB)	Ar			4:32P
4:12P				Ar Warsaw	Lv			4:20P

* Operates daily

x Operates Mon., Wed., Fri.

Operates Tue., Thur., Sat.

Note 1: Connections at Peoria, Illinois

C&IM (via P&PU)

C&NW (via P&PU)

CB&Q (Direct)

CRI&P (Direct)

FBL (via P&PU or CRI&P)

NYC (C) (via P&PU)

NKP (via P&PU)

PRR (via P&PU)

P&PU (Direct)

PT (Direct)

IC (via P&PU)

IT (Direct)

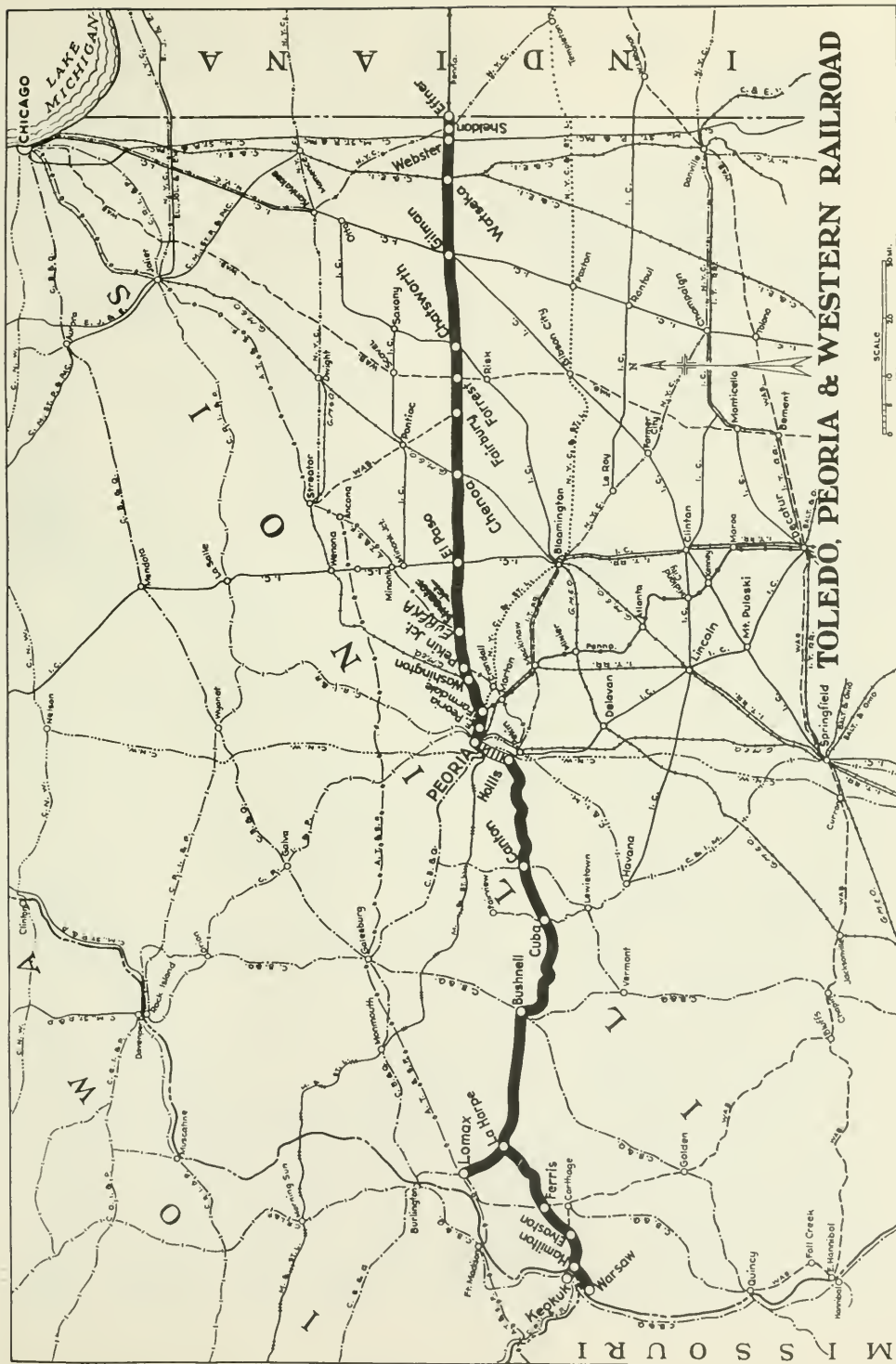
GM&O (via P&PU)

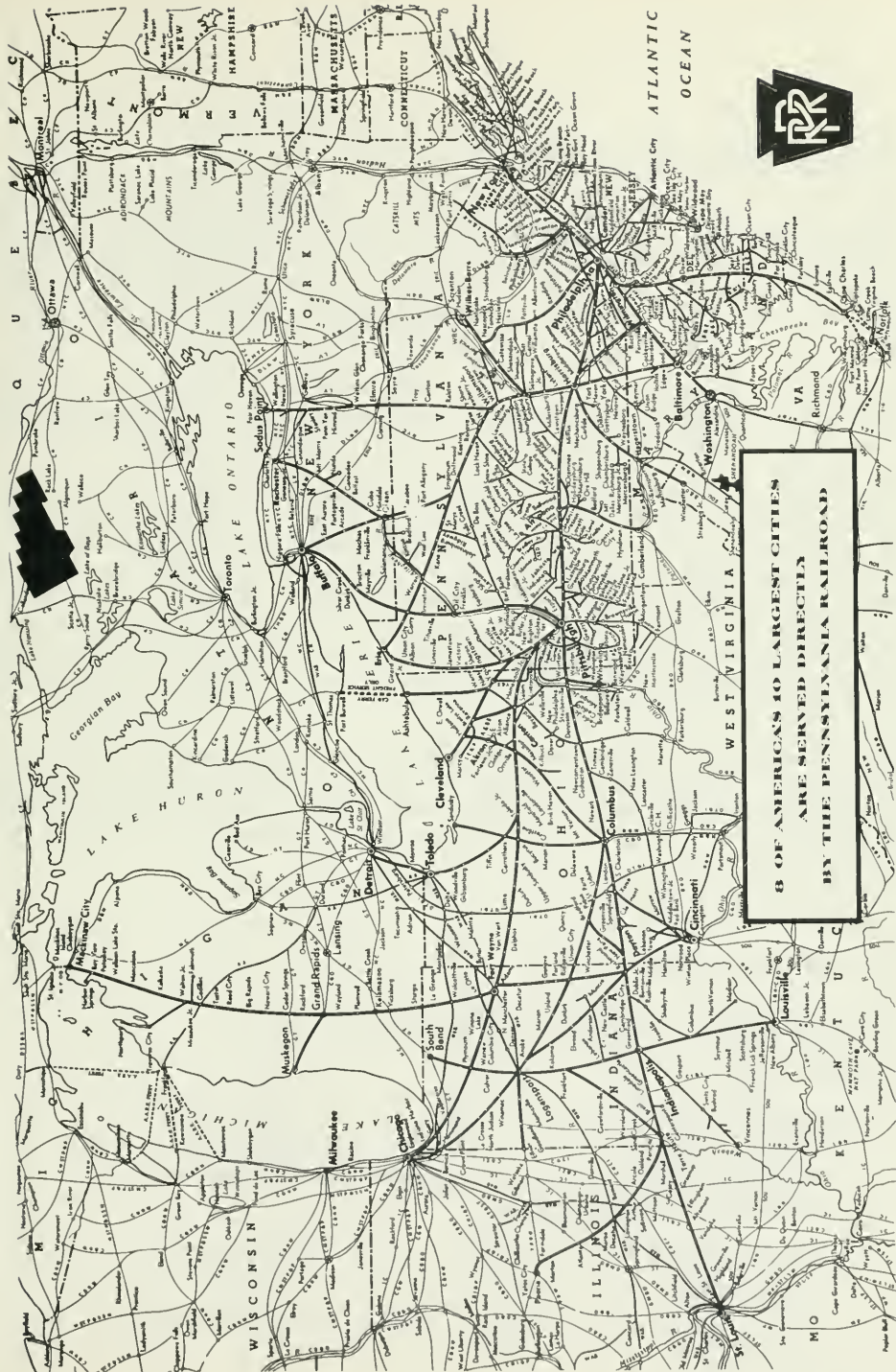
M&STL (Direct)

Note 2: Washington is served by switcher from Peoria Yard (Peoria) at approximately 2:00 P. M. and 3:00 A. M. daily.

Service to and from intermediate points not shown above is performed by local trains No. 24, 25, 103, and 104. These schedules published for shippers' use only. Subject to change without notice.







8 OF AMERICA'S 10 LARGEST CITIES
ARE SERVED DIRECTLY
BY THE PENNSYLVANIA RAILROAD



PEORIA & PEKIN UNION RAILROAD COMPANY:

The Peoria-Pekin, Illinois, switching district includes Acme, Crescent, East Peoria, Lamarsh, McGrath Siding, Pekin, Peoria, Peoria Heights, South Bartonville and Wesley and is served by the A. T. & S. F., G. M. & O., C. N. W., C. B. & Q., C. & I. M., C. R. I. & P., I. C., I. T., M. & St. L., N. K. P., N. Y. C., Pa., P. & P. U., Peoria Terminal Company, T. P. & W., and F. B. L., Inc.

The C. R. I. & P., C. B. & Q., I. T., M. & St. L., and T. P. & W. operate their own individual terminal facilities and freight houses. The Peoria Terminal Company, a terminal switching line, is owned and operated by the C. R. I. & P.

The Peoria and Pekin Union Railroad, operating as a terminal switching line, is owned by the C. & I. M., C. & N. W., I. C., N. K. P., N. Y. C. and Pa. None of the owner lines nor the G. M. & O. operate terminal facilities in Peoria. All of the seven lines, except the C. & N. W., operate their freight trains into and out of the P. & P. U.'s East Peoria Yard under their own power. The C. & N. W. operate into the C. & N. W. Yard on the Peoria side of the Illinois River and the P. & P. U. also make up and breakup their trains and handle terminal switching. There is also a joint freight house operation, which is under the supervision of the P. & P. U. Railroad.

The interchange of through traffic between the seven tenant lines of the P. & P. U., the traffic is considered delivered to the outbound tenant line at the time of arrival of the inbound tenant train. Through traffic for other connecting lines at Peoria is delivered by the P. & P. U. within a reasonable time after arrival of tenant line trains.

No passenger service.

See Map 10, page 280.

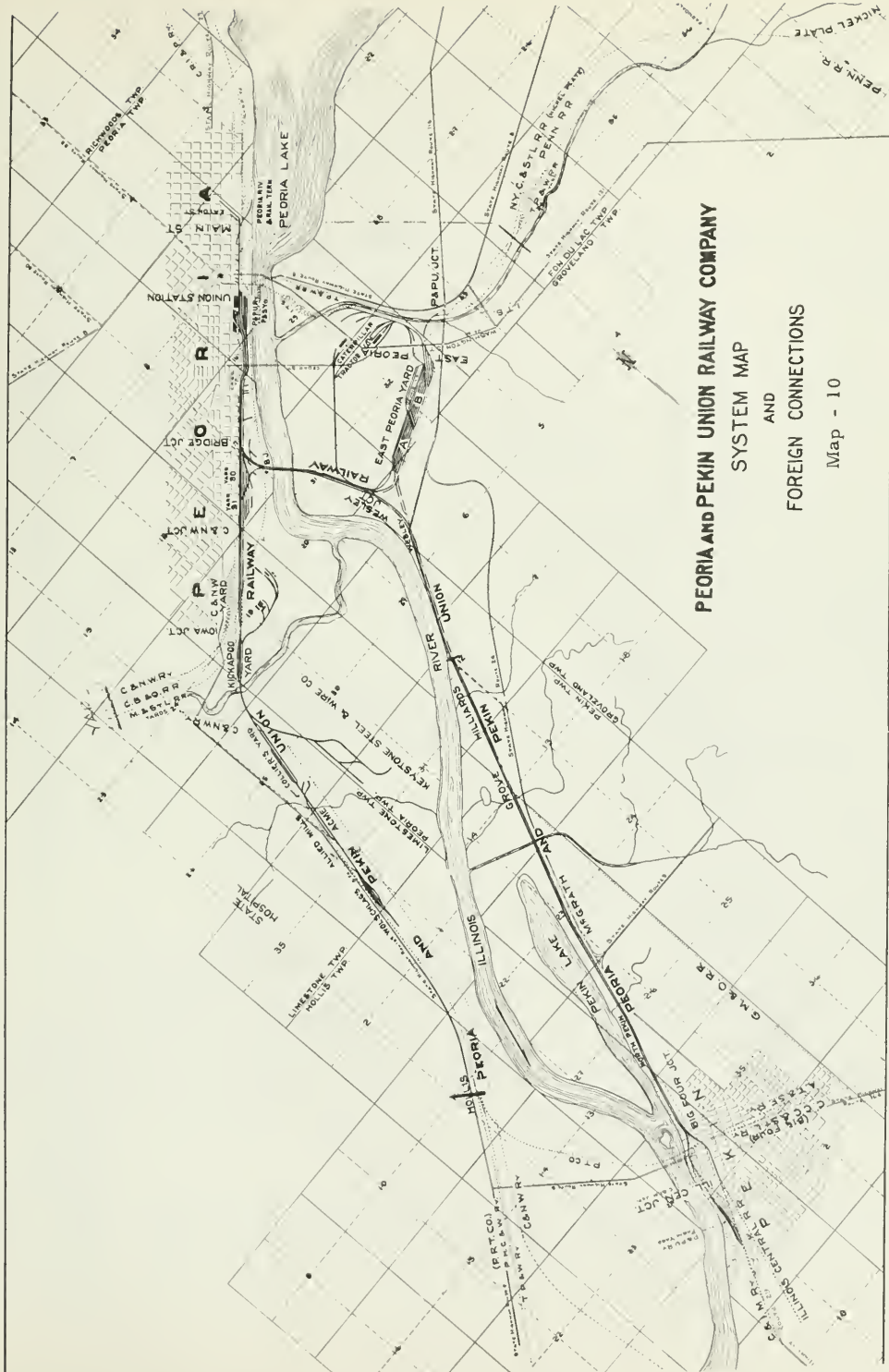
GULF, MOBILE & OHIO RAILROAD COMPANY:

Freight Schedule:

leave Peoria (#232)	8:30 p. m.
arrive Bloomington	11:15 p. m.
(making direct connections with through trains to Chicago, St. Louis, and Kansas City.)	
leave Bloomington	2:35 a. m.
(same connections as above)	
arrive Peoria	5:30 a. m.

No passenger service.

See Map 11, page 281.



PEORIA AND PEKIN UNION RAILWAY COMPANY

SYSTEM MAP

AND

FOREIGN CONNECTIONS

Map - 10

MINNEAPOLIS & ST. LOUIS RAILWAY:

Freight Schedule:

<u>96*</u> <u>Daily</u>	<u>20</u> <u>Daily</u>		<u>19</u> <u>Daily</u>	<u>95**</u> <u>Daily</u>
4:10 p.m.	3:45 a.m.	Cedar Lake, Minnesota	5:35 p.m.	5:00 a.m.
8:15 p.m.	7:00 a.m.		2:10 p.m.	12:30 a.m.
9:30 p.m.	7:05 a.m.	Albert Lea, Minnesota	2:05 p.m.	11:00 p.m.
2:25 a.m.	11:05 a.m.		10:00 a.m.	5:15 p.m.
3:40 a.m.	11:10 a.m.	Marshalltown, Iowa	9:55 a.m.	4:00 p.m.
5:45 a.m.	1:15 p.m.		7:55 a.m.	2:00 p.m.
8:00 a.m.	1:45 p.m.	Oskaloosa, Iowa	7:50 a.m.	11:25 a.m.
12:30 p.m.	5:55 p.m.		3:50 a.m.	6:45 a.m.
12:35 p.m.	6:00 p.m.	Monmouth, Illinois	3:45 a.m.	6:40 a.m.
		Nemo, Illinois	3:30 a.m.	
4:45 p.m.	8:40 p.m.	Peoria, Illinois	12:15 a.m.	3:00 a.m.

No passenger service

* No. 96 does not operate between Cedar Lake and Marshalltown Sunday or between Marshalltown and Oskaloosa on Monday.

**No. 95 does not operate between Oskaloosa and Albert Lea on Sunday.

See Map 12, page 283.

PEORIA TERMINAL COMPANY:

Freight Schedule:

Between Peoria and Pekin--

leave Peoria daily

3:00 p.m.

7:00 p.m.

arrive Peoria daily

3:00 p.m.

11:00 p.m.

No passenger service

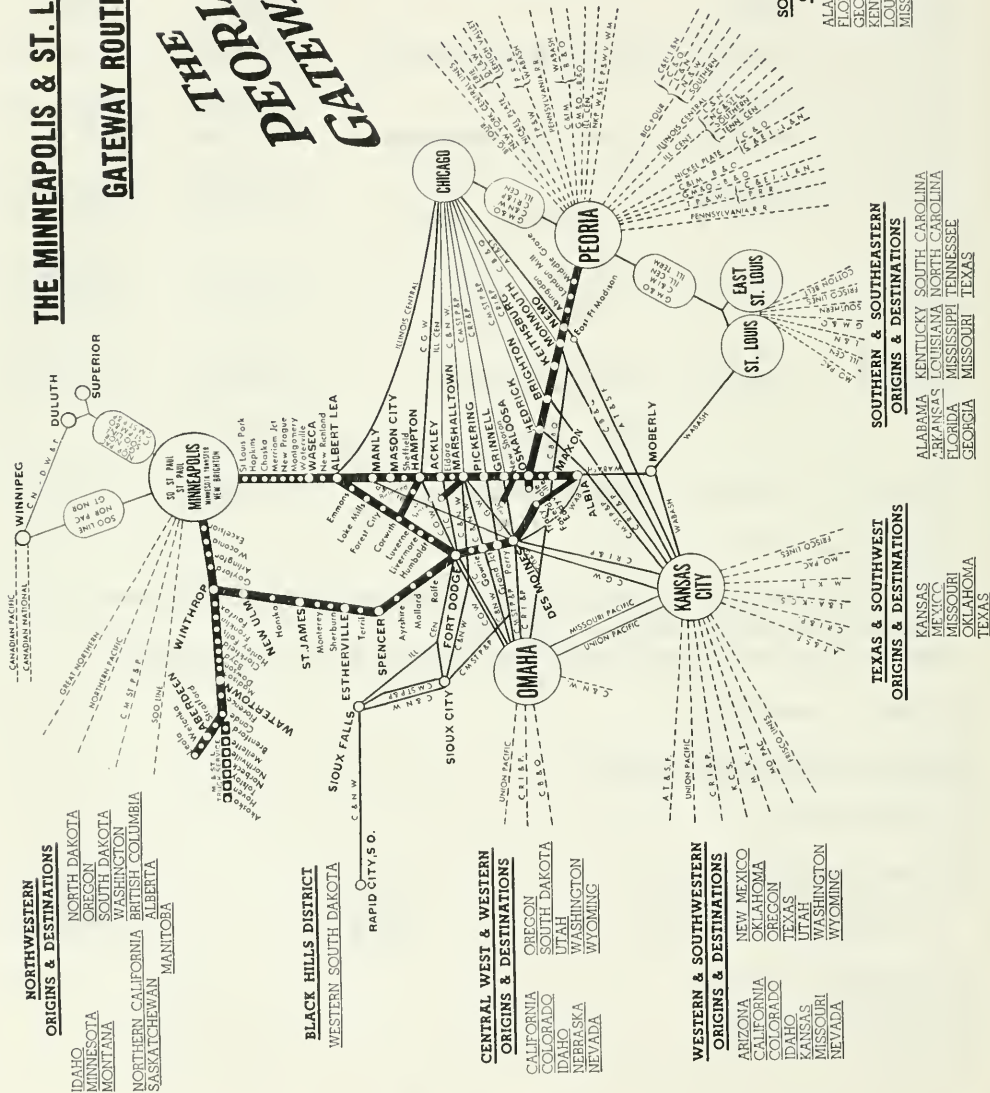
See Map 13, page 284.

THE MINNEAPOLIS & ST. LOUIS RAILWAY CO.

GATEWAY ROUTING MAP

THE PEORIA GATEWAY

A RATE AND A ROUTE
FOR EVERY GATEWAY



PEORIA TERMINAL COMPANY

There is not a map available.

See map of Peoria and Pekin Union Railway Company on page 280.

ATCHISON, TOPEKA, & SANTA FE RAILWAY COMPANY:

Freight Schedule:

Between Pekin and Streator, Illinois --

leave Pekin	8:00 a. m.
arrive Streator	1:20 p. m.
leave Streator	6:30 a. m.
arrive Pekin	1:00 p. m.

From Chicago to (through Streator, Illinois):

leave Chicago	11:00 a. m. (daily)
arrive Phoenix	3:00 a. m. (fifth day)
arrive Los Angeles	4:00 p. m. (fifth day)
arrive San Francisco Bay Area	4:00 p. m. (fifth day)
Cut-off at Kansas City	
arrive Ft. Worth	1:00 p. m. (third day)
arrive Galveston	2:00 a. m. (fourth day)
leave Chicago	9:30 p. m. (daily)
arrive Phoenix	3:00 a. m. (fifth day)
arrive Los Angeles	2:00 p. m. (fifth day)
arrive San Francisco Bay Area	3:00 p. m. (fifth day)
Cut-off to Denver	
arrive Denver	9:00 p. m. (second day)
leave Chicago	6:00 p. m. (daily)
arrive Houston	10:00 p. m. (second day)

Passenger Service:

From Chillicothe, Illinois --

No.

17	leave Chillicothe	9:15 p. m.
	arrive Los Angeles	8:30 a. m. (second day)
18	leave Los Angeles	8:00 p. m.
	arrive Chillicothe	11:00 a. m. (second day)
19	leave Chillicothe	11:55 a. m.
	arrive Los Angeles	10:30 p. m. (second day)

ATCHISON, TOPEKA & SANTA FE RAILWAY COMPANY: (continued)

<u>No.</u>		
20	leave Los Angeles arrive Chillicothe	4:00 p. m. 7:10 a. m. (second day)
21	leave Chillicothe arrive Los Angeles	7:55 p. m. 7:15 a. m. (second day)
22	leave Los Angeles arrive Chillicothe	1:30 p. m. 4:40 a. m. (second day)
1	leave Chillicothe arrive San Francisco	6:10 p. m. 1:30 p. m. (second day)
123	leave Chicago leave Chillicothe arrive Los Angeles	12:15 p. m. 2:40 p. m. 11:15 a. m. (second day)
124	leave Los Angeles arrive Chillicothe arrive Chicago	12:01 p. m. 12:30 p. m. (second day) 3:00 p. m.
15	leave Chicago leave Chillicothe arrive Galveston	6:00 p. m. 8:10 p. m. 8:15 p. m. (second day)
16	leave Galveston arrive Chillicothe arrive Chicago	6:50 a. m. 6:25 a. m. (second day) 9:00 a. m.
9	leave Chicago leave Chillicothe arrive Kansas City	10:00 p. m. 12:40 a. m. 7:30 a. m.
10	leave Kansas City arrive Chillicothe arrive Chicago	10:00 p. m. 4:35 a. m. 7:30 a. m.
5	leave Chicago leave Chillicothe arrive Galveston	10:45 p. m. 1:30 a. m. 9:50 a. m. (second day)
6	leave Galveston arrive Chillicothe arrive Chicago	7:30 p. m. 4:50 a. m. (second day) 7:45 a. m.
4	leave San Francisco arrive Chillicothe	11:00 a. m. 9:50 a. m. (second day)

ATCHISON, TOPEKA & SANTA FE RAILWAY COMPANY: (continued)

No.

11-111	leave Chicago	9:45 a. m.
	leave Chillicothe	11:50 a. m. (second day)
	arrive Dallas	7:45 p. m.
112-12	leave Dallas	8:15 p. m.
	arrive Chillicothe	5:35 p. m. (second day)
	arrive Chicago	8:00 p. m.

See Map 14, page 288.

ILLINOIS TERMINAL:

Freight Service:

Leave Peoria

11:45 p. m.
5:00 p. m.
1:30 p. m.
12:01 p. m.
8:15 a. m.
1:00 a. m.

Arrive St. Louis

7:40 a. m.
9:45 p. m.
6:40 p. m.
8:50 p. m.
1:00 p. m.
9:15 a. m.

Leave St. Louis

12:30 a. m.
8:30 a. m.
1:15 p. m.
1:35 p. m.
5:00 p. m.
11:45 p. m.

Arrive Peoria

9:20 a. m.
1:15 p. m.
6:25 p. m.
9:30 p. m.
9:45 p. m.
7:40 a. m.

Passenger Service:

One round trip daily between Peoria and St. Louis.

See Map 15, page 289.

THE ATCHAFALAYA, TOPEKA AND SANTA FE RAILWAY SYSTEM

This map illustrates the extensive railway network across the United States, highlighting the routes of the Atchafalaya, Topeka, and Santa Fe systems. Major cities such as Los Angeles, San Francisco, Chicago, and New York are clearly marked. The map also depicts geographical features like the Gulf of California and the Gulf of Mexico.

Legend:

- Solid Line:** Two Tracks
- Dashed Line:** Motor Route Coordinated with Train Service

The map shows a dense web of rail lines, particularly concentrated in the eastern half of the country, with numerous branch lines extending to smaller towns and cities. State names are printed throughout the map, providing a clear geographical context for the railway system.

MILEAGE OF SANTA FE LINES OPERATED

9,084	miles
1,889	miles
2,103	miles



ILLINOIS TERMINAL RAILROAD COMPANY

364 MILES OF ELECTRIC AND DIESEL SERVICE BETWEEN PEORIA (SEE NOTES A AND B), SPRINGFIELD, ST. LOUIS, ALTON, WOOD RIVER, ROCKANA, DECATUR AND CHAMPAIGN-URBANA WITH OUTER BELTS CIRCLING ALL PRINCIPAL CITIES.

SERVING EXCLUSIVELY MORE THAN 250 INDUSTRIES AND 3500 OTHERS THROUGH RECIPROCAL SWITCHING.

ENTERING ST. LOUIS, MISSOURI, OVER OWN INDEPENDENT BRIDGE AND ELEVATED STRUCTURES. FREIGHT AND PASSENGER INTERCHANGE WITH ALL RAILWAYS.

NOTE A: ALL PASSENGER TRAINS DEPART FROM AND ARRIVE AT PASSENGER STATION LOCATED AT 1167 WEST WASHINGTON STREET, EAST PEORIA, ILLINOIS. PASSENGERS MAY AVAIL THEMSELVES OF TAXICAB OR FREQUENT CITY BUS SERVICE BETWEEN STATION AT 1167 WEST WASHINGTON STREET, EAST PEORIA, ILLINOIS, AND POINTS IN PEORIA, ILLINOIS.

NOTE B: CARLOAD FREIGHT HANDLED TO AND FROM INDUSTRIES IN THE PEORIA SWITCHING DISTRICT THROUGH THE FACILITIES OF THE P.&U. RY. CO. AND CONNECTIONS.

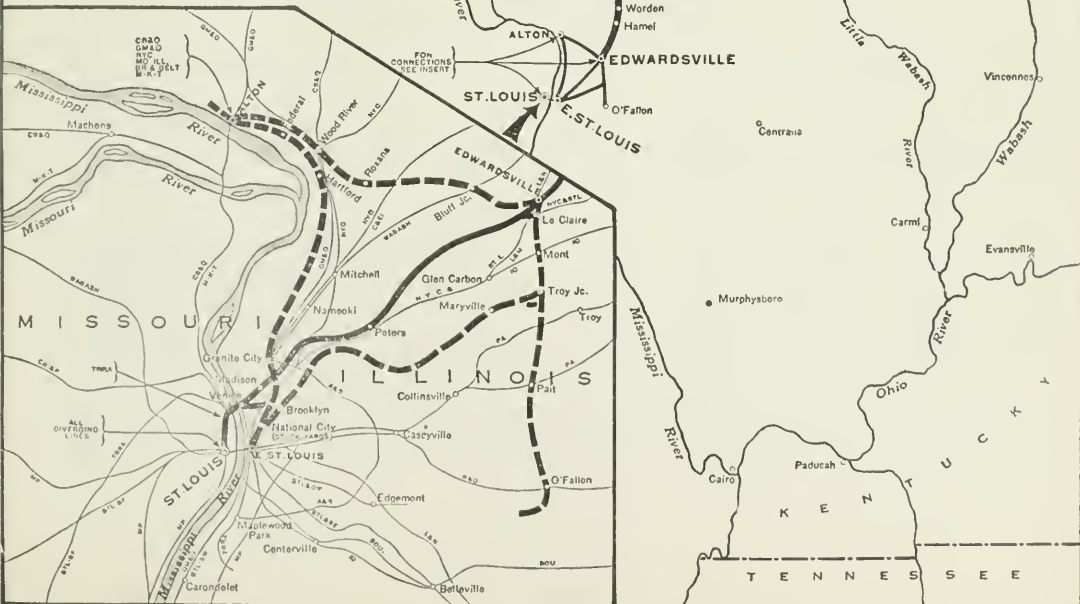


LEGEND:

— Freight and passenger lines — freight service operated by Diesel-electric motive power. Passenger service operated by electric motive power.

— Freight lines operated by Diesel-electric motive power.

THE CENTRAL GATEWAY
TO THE
NORTH—EAST
SOUTH and WEST



CENTRAL TERRITORY RAILROADS

Tariff No. E-1009, I. C. C. 4487, Uniform Freight Classification No. 2, I. C. C. A-2

As of July 28, 1954		Class				
Peoria, Illinois	100	85	70	50	35	27 ⁵
To	Rates					
Akron, Ohio	221	188	155	111	77	61
Cincinnati, Ohio	185	157	130	93	65	51
Cleveland, Ohio	216	184	151	108	76	59
Columbus, Ohio	201	171	141	101	70	55
Dayton, Ohio	185	157	130	93	65	51
Detroit, Michigan	206	175	144	103	72	57
Evansville, Indiana	168	143	118	84	59	46
Grand Rapids, Michigan	179	152	125	90	63	49
Indianapolis, Indiana	153	130	107	77	54	42
Louisville, Kentucky	185	157	130	93	65	51
Pittsburgh, Pennsylvania	245	208	172	123	86	67
Terre Haute, Indiana	140	119	98	70	49	39
Toledo, Ohio	190	162	133	95	67	52
Youngstown, Ohio	231	138	113	116	81	64

All rates are subject to 15% increase. Tariff X-175-B I. C. C. 4502

ILLINOIS FREIGHT ASSOCIATION

Tariff No. I/S-1003-A, I. C. C. 797, Uniform Freight Classification No. 2, I. C. C. A-2

As of July 28, 1954		Class				
Peoria, Illinois	100	85	70	50	35	27 ⁵
To	Rates					
Birmingham, Alabama	2.55	2.17	1.79	1.28	.89	.70
Charleston, South Carolina	3.45	2.93	2.42	1.73	1.21	.95
Chattanooga, Tennessee	2.45	2.08	1.72	1.23	.86	.67
Knoxville, Tennessee	2.55	2.17	1.79	1.28	.89	.70
Memphis, Tennessee	2.16	1.84	1.51	1.08	.76	.59
Nashville, Tennessee	2.11	1.79	1.48	1.06	.74	.58

All rates are subject to 15% increase. Tariff X-175-B I. C. C. 4502

ILLINOIS FREIGHT ASSOCIATION

Tariff No. I-1002, I. C. C. 757, Uniform Freight Classification No. 2, I. C. C. A-2

As of July 28, 1954		Class				
Peoria, Illinois	100	85	70	50	35	27 ⁵
To	Rates					
Chicago, Illinois	1.33	1.13	.93	.67	.47	.37
Davenport, Iowa	1.12	.95	.78	.56	.39	.31
Madison, Wisconsin	1.46	1.24	1.02	.73	.51	.40
Milwaukee, Wisconsin	1.56	1.33	1.09	.78	.55	.43
Rockford, Illinois	1.26	1.07	.88	.63	.44	.35
St. Louis, Missouri	1.36	1.16	.95	.68	.48	.37

All rates are subject to 15% increase. Tariff X-175-B I. C. C. 4502

WESTERN TRUNK LINE

Tariff No. W-1000, I. C. C. A-3929, Uniform Freight Classification No. 2, I. C. C. A-2

As of July 28, 1954		Class				
Peoria, Illinois	100	85	70	50	35	27 ⁵
To	Rates					
Denver, Colorado	3.30	2.81	2.31	1.65	1.16	.91
Des Moines, Iowa	1.68	1.43	1.18	.84	.59	.46
Duluth, Minnesota	2.36	2.01	1.65	1.18	.83	.65
Kansas City, Kansas	1.90	1.62	1.33	.95	.67	.52
Minneapolis, Minnesota	2.11	1.79	1.48	1.06	.74	.58
Omaha, Nebraska	2.01	1.71	1.41	1.01	.70	.55
Topeka, Kansas	2.06	1.75	1.44	1.03	.72	.57
Wichita, Kansas	2.41	2.05	1.69	1.21	.84	.66

All rates are subject to 15% increase. Tariff X-175-B, I. C. C. 4502

SOUTHWESTERN LINES

Tariff No. SW/W-1006, I. C. C. 3999

As of July 28, 1954		Class				
Peoria, Illinois	100	85	70	50	35	27 ⁵
To	Rates					
Little Rock, Arkansas	2.31	1.96	1.62	1.16	.81	.64
Oklahoma City, Oklahoma	2.70	2.30	1.89	1.35	.95	.74
Springfield, Missouri	2.06	1.75	1.44	1.03	.72	.57
Tulsa, Oklahoma	2.45	2.08	1.72	1.23	.86	.67

All rates are subject to 15% increase. Tariff X-175-B, I. C. C. 4502

Table 11 (continued)

CENTRAL FREIGHT ASSOCIATION

Tariff No. 260-D, I. C. C. 3814, Consolidated Freight Classification No. 20, I. C. C. 64

As of July 28, 1954		Class					
Peoria, Illinois	1	2	3	4	5	6	
To	Rates						
Toronto , Ontario, Canada	2.72	2.30	1.90	1.36	1.09	.83	
All rates are subject to 15% increase. Tariff X-175-B, I. C. C. 4502.							

Table 11 (continued)

COMMODITY RATES

As of July 28, 1954

Peoria, Illinois to:	Tariffs			
Akron, Ohio	WTL	58-X	ICC	A-3723
	CTR	434-E	ICC	3388
	CTR	E-2009	ICC	4607
Birmingham, Alabama	CTR	393-F	ICC	4527
Charleston, South Carolina	CTR	393-F	ICC	4527
Chattanooga, Tennessee	CTR	393-F	ICC	4527
Chicago, Illinois	IFA	37-F	ICC	799
	IFA	82-B	ICC	749
Individual Lines Tariff				
Cincinnati, Ohio	CTR	115-T	ICC	4233
	WTL	58-X	ICC	A-3723
	CTR	434-E	ICC	3388
	CTR	E-2009	ICC	4607
Cleveland, Ohio	WTL	58-X	ICC	A-3723
	CTR	434-E	ICC	3388
	CTR	E-2009	ICC	4607
Columbus, Ohio	WTL	58-X	ICC	A-3723
	CTR	434-E	ICC	3388
	CTR	E-2009	ICC	4607
Davenport, Iowa	IFA	82-B	ICC	749
	WTL	240-K	ICC	A-3996
Individual Lines Tariffs				
Dayton, Ohio	WTL	58-X	ICC	A-3723
	CTR	434-E	ICC	3388
	CTR	E-2009	ICC	4607
Denver, Colorado	WTL	111-M	ICC	3600
	WTL	240-K	ICC	A-3996
Des Moines, Iowa	WTL	50-T	ICC	A-3790
	WTL	240-K	ICC	A-3996
Detroit, Michigan	WTL	58-X	ICC	A-3723
	CTR	434-E	ICC	3388
	CTR	E-2009	ICC	4607
Duluth, Minnesota	WTL	5-U	ICC	3910
	WTL	240-K	ICC	A-3996
Evansville, Indiana	CTR	115-T	ICC	4233
	WTL	58-X	ICC	A-3723
	CTR	434-E	ICC	3388
	CTR	E-2009	ICC	4607
Grand Rapids, Michigan	WTL	58-X	ICC	A-3723
	CTR	434-E	ICC	3388
	CTR	E-2009	ICC	4607
Indianapolis, Indiana	CTR	115-T	ICC	4233
	WTL	58-X	ICC	A-3723
	CTR	434-E	ICC	3388
	CTR	E-2009	ICC	4607

Table 12

COMMODITY RATES

As of July 28, 1954

Peoria Illinois to:	Tariffs			
Kansas City, Kansas	SWL	125-N	ICC	3825
	WTL	1-B	ICC	4038
	WTL	240-K	ICC	A-3996
Knoxville, Tennessee	CTR	393-F	ICC	4527
Little Rock, Arkansas	SWL	187-O	ICC	4013
Louisville, Kentucky	CTR	115-T	ICC	4233
	CTR	434-E	ICC	3388
	CTR	E-2009	ICC	4607
Madison, Wisconsin	IFA	37-F	ICC	799
	IFA	82-B	ICC	749
Memphis, Tennessee	CTR	393-F	ICC	4527
Milwaukee, Wisconsin	IFA	37-F	ICC	799
	IFA	82-B	ICC	749
	WTL	240-K	ICC	A-3996
Minneapolis, Minnesota	WTL	5-U	ICC	3910
	WTL	240-K	ICC	A-3996
Nashville, Tennessee	CTR	393-F	ICC	4527
Oklahoma City, Oklahoma	SWL	125-N	ICC	3825
	SWL	187-O	ICC	4013
Omaha, Nebraska	WTL	1-B	ICC	4038
	WTL	240-K	ICC	A-3996
Pittsburgh, Pennsylvania	CTR	434-E	ICC	3388
	WTL	58-X	ICC	A-3723
	CTR	E-2009	ICC	4607
Rockford, Illinois	IFA	37-F	ICC	799
	IFA	82-B	ICC	749
Springfield, Missouri	WTL	18-T	ICC	A-3991
	WTL	240-K	ICC	A-3996
St. Louis, Missouri	IFA	30-G	ICC	690
	IFA	82-B	ICC	749
Terre Haute, Indiana	WTL	58-X	ICC	A-3723
	CTR	434-E	ICC	3388
	CTR	E-2009	ICC	4607
Toledo, Ohio	WTL	58-X	ICC	A-3723
	CTR	434-E	ICC	3388
	CTR	E-2009	ICC	4607
Topeka, Kansas	WTL	18-T	ICC	A-3991
	WTL	240-K	ICC	A-3996
Toronto, Ontario, Canada	WTL	58-X	ICC	A-3723
Tulsa, Oklahoma	SWL	125-N	ICC	3825
	SWL	187-O	ICC	4013
Wichita, Kansas	SWL	125-N	ICC	3825
	WTL	18-T	ICC	A-3991
	WTL	240-K	ICC	A-3996

Table 12 (continued)

COMMODITY RATES

As of July 28, 1954

<u>Peoria Illinois to:</u>			<u>Tariffs</u>	
<u>Youngstown, Ohio</u>	WTL	58-X	ICC	A-3723
	CTR	434-E	ICC	3388
	CTR	E-2009	ICC	4607

Table 12 (continued)

WATER TRANSPORTATION

Peoria enjoys a distinct advantage in being located on the Illinois River, an integral part of the inland waterways system of the United States.

One reason this is advantageous is rather indirect; it causes lower railroad rates to other cities located on the waterway. Of course the greatest direct advantage is low cost transportation, most barge rates being approximately 80% of railroad rates. Where time is not a deciding factor (nine days from Peoria to New Orleans, seventeen days return) many commodities are shipped by water.

WATER DISTANCES FROM PEORIA

<u>To</u>	<u>1947 Light List</u>
Plaquemine	1138
Baton Rouge	1118
Natchez	986
Vicksburg	915
Greenville	813
Helena	687
Memphis	614
Osceola	556
Caruthersville	498
New Madrid	452
Cairo	380
Cape Girardeau	328
St. Louis	200
Missouri River Mouth	187
Alton	177
Burlington	347
Muscatine	399
Rock Island	426
Davenport	426
Moline	430
Clinton	462
Dubuque	523
LaCrosse	641
Winona	669
St. Paul	783
Minneapolis	797
Grafton	162
Joliet	126
Lockport	130
Lemont	138
Chicago	158*

* South Western Avenue Bridge.

Table 13

SCHEDULES AND SHIPPING VOLUMES OF COMMON CARRIERS
ON THE ILLINOIS RIVER

AMERICAN BARGE LINE COMPANY --

1953 - 2,782 tons of iron and steel products originating in Peoria.
11,083 tons of iron and steel products delivered to Peoria.

Approximate transit time, Peoria to:

New Orleans - 12 days
Memphis - 9 days
Houston - 17 days
Pittsburgh - 16 days

See Map 1-A, page 300.

JOHN I. HAY COMPANY --

Tonnage information confidential (do deliver and pick up goods in Peoria).

See Map 2-A, page 301.

MISSISSIPPI VALLEY BARGE LINE COMPANY --

No tonnage given

See Map 3-A, page 302.

FEDERAL BARGE LINES --

Weekly service offered by barge to and from Peoria.

Transit time, Peoria to:

New Orleans - 9 days southbound
17 days northbound

Tonnage handled from January, 1953, to December, 1953. Shown in Tons -
2000 pounds

From Peoria, Illinois, (beyond) to:

New Orleans Proper - 697 - Beer
20 - Epsom salt
122 - Iron and steel articles
33 - Steel drums
347 - Wrought iron pipe

FEDERAL BARGE LINES -- (continued)

57 - Canned goods
 64 - Weed killing compounds
 9 - Bicycles
 1 - Waste baskets
 68 - Flour
 14 - Child's vehicles

New Orleans Beyond - 28 - Calcium chloride
 1418 - Iron and steel articles
 511 - Steel drums
 105 - Tin plate

Baton Rouge Beyond - 28 - Soap
 59 - Tin plate

Vicksburg Beyond - 128 - Beer
 954 - Iron and steel articles
 41 - Soap
 26 - Steel cabinets

Helena Beyond - 1158 - Tin plate

Memphis Beyond - 13 - Soap
 292 - Steel cabinets

Memphis Proper - 1636 - Epsom salt
 1080 - Iron and steel articles
 162 - Wrought iron pipe

St. Louis Proper - 94 - Iron and steel articles

Mobile Proper - 21 - Epsom salt
 5 - Iron and steel articles

From Peoria, Illinois, (Proper) to:

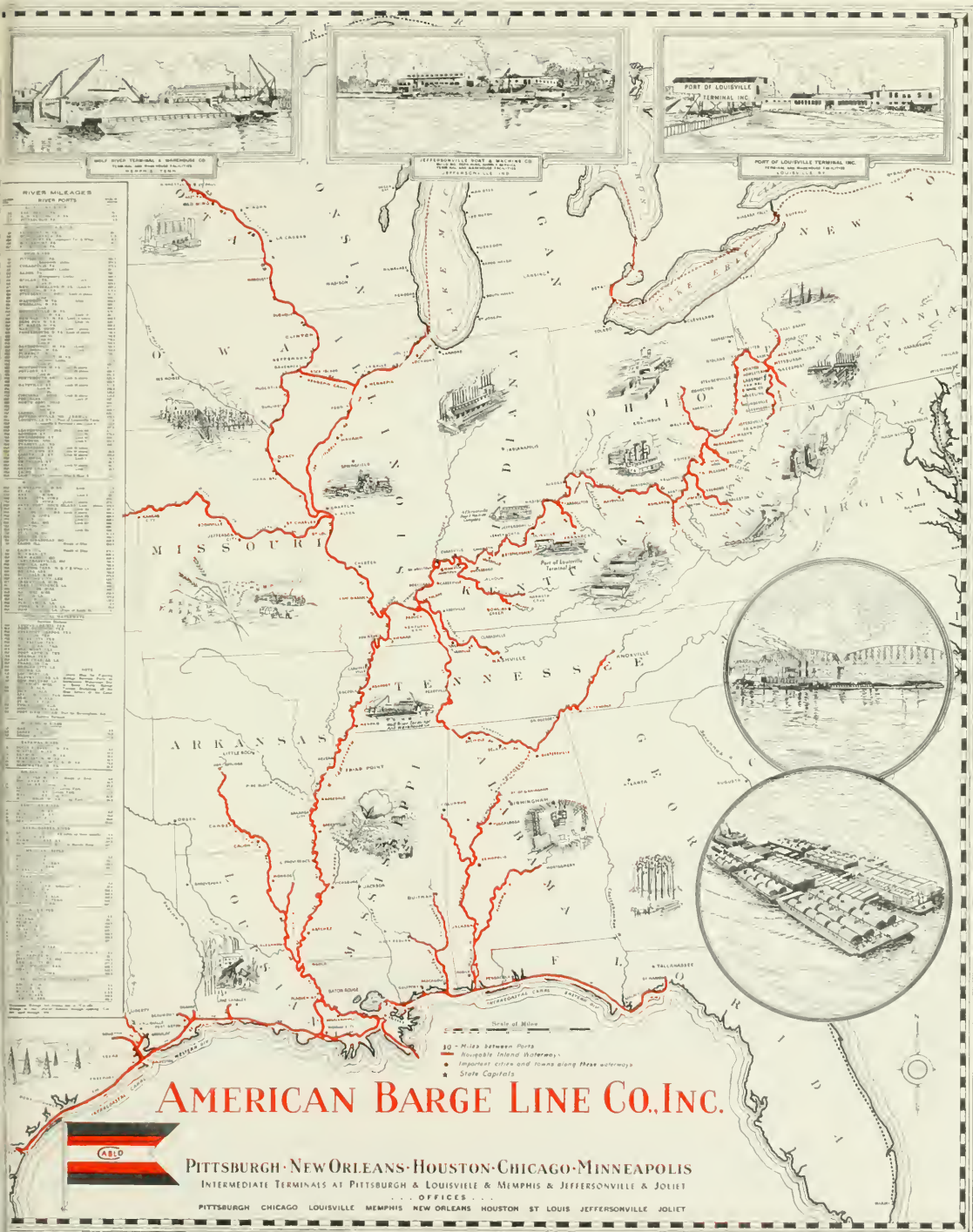
New Orleans Beyond - 156 - Beer
 2346 - Iron and steel articles
 57 - Caterpillar graders
 42 - Potash

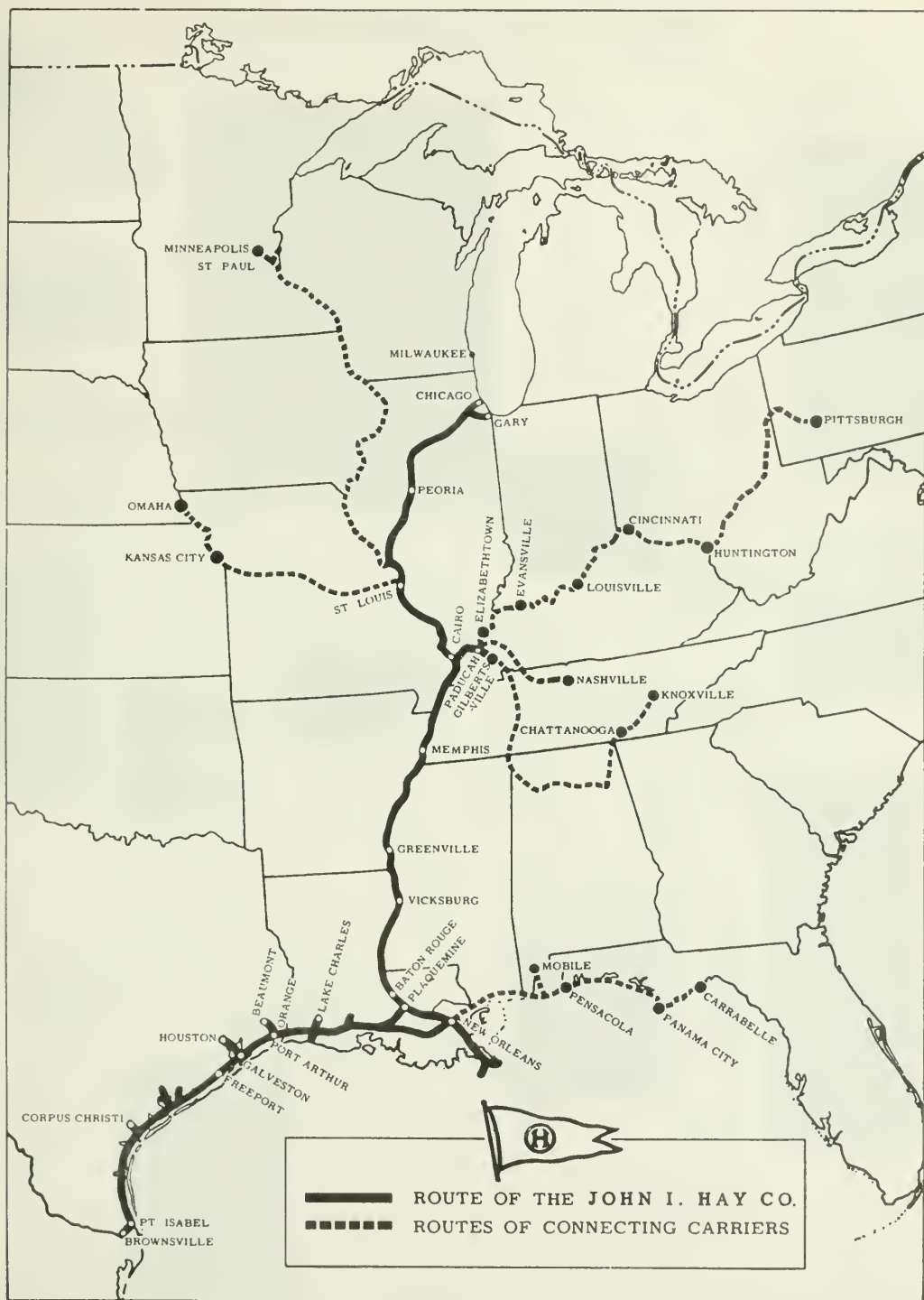
Baton Rouge Proper - 20 - Iron and steel articles

To Peoria, Illinois, (For, Beyond) from:

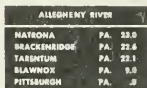
Memphis, Tennessee, Proper - 55 N. T. Scrap bagging
 303 N. T. Cotton linters
 Memphis, Tennessee, Beyond - 61 N. T. Cotton sweepings
 Vicksburg Proper - 26 N. T. Cooperage stock
 Vicksburg Beyond - 167 N. T. Cotton motes

See Map 4-A, page 303





1017 OLIVE STREET
SAINT LOUIS, MISSOURI
Chestnut 1-4574



MISSIS • LoCROSSE

MISSISSIPPI RIVER ALONG OHIO RIVER MOUTH		
MISSOURI	MISSOURI	813.5
ST. LOUIS	MISSOURI	820.1
ST. BARN	MISSOURI	812.8
SP. MO.	MISSOURI	780.5
SP. MO.	MISSOURI	773.0
SP. MO.	MISSOURI	753.7
SP. MO.	MISSOURI	733.5
SP. MO.	MISSOURI	719.9
SP. MO.	MISSOURI	676.2
SP. MO.	MISSOURI	660.3
SP. MO.	MISSOURI	625.6
SP. MO.	MISSOURI	603.3
SP. MO.	MISSOURI	588.7
SP. MO.	MISSOURI	482.4
SP. MO.	MISSOURI	470.2
SP. MO.	MISSOURI	362.4
SP. MO.	MISSOURI	348.8
SP. MO.	MISSOURI	329.7
SP. MO.	MISSOURI	303.2
SP. MO.	MISSOURI	282.4
SP. MO.	MISSOURI	267.9
SP. MO.	MISSOURI	217.6
SP. MO.	MISSOURI	195.3
SP. MO.	MISSOURI	180.5
SP. MO.	MISSOURI	164.7
SP. MO.	MISSOURI	150.2

MISSOURI RIVER		
KANSAS CITY	MO.	377.3
BOONVILLE	MO.	196.3
JEFFERSON CITY	MO.	143.5
HERMANN	MO.	96.8
ST. CHARLES	MO.	28.1
MISSOURI RIVER MOUTH		0

[illegible]

ILLINOIS RIVER		
CHICAGO	ILL.	271.1
LEWISTON	ILL.	300.7
LOCKPORT	ILL.	293.7
JOULET	ILL.	288.7
CITTAWA	ILL.	329.4
PEORIA	ILL.	163.4
SAVANNA	ILL.	190.1
REARSTOWN	ILL.	26.5
GRAPTON	ILL.	1
ILLINOIS RIVER MOUTH		0

TENNESSEE RIVER		
PAINEGAN	KT	0
CALVERT CITY	KT	16.3
SILVERSVILLE	KT	21.9
JOHNS CIVILS	TMNR	96.6
CLIFTON	TMNR	138.1
PICKWILL DAM	TMNR	206.9
SHEPHERD	ALA	233.9
ALBANY	ALA	236.5
DECATUR	ALA	304.5
CHATTESVILLE	ALA	538.1
CHATTANOOGA	TMNR	680.0
HIWASSEE RIVER MOUTH		590.1
KNOXTON	TMNR	567.6
LOUISON	TMNR	591.9
KNOXVILLE	TMNR	661.6

[illegible]

SMITHLAND	KY.	1
DFUCSBURG	KY.	1
CLARKSVILLE	TENN.	12
WEST NASHVILLE	TENN.	18
NASHVILLE	TENN.	19
OLD HICKORY	TENN.	21
CARTHAGE	TENN.	26

KANAWHA RIVER	
FOUNTAINBLEAU	W. VA. 8
NITRO	W. VA. 42.4
ST. ALBANS	W. VA. 45.8
INSTITUTE	W. VA. 50.6
30. CHARLESTON	W. VA. 56.8
CHARLESTON	W. VA. 58.8
ETOWAH	W. VA. 63.8
MAIDEN	W. VA. 64.3
BILLS	W. VA. 69.6
CABIN CREEK	W. VA. 74.3
HUGHSTON	W. VA. 81.2
KANAWHA FALLS	W. VA. 95.9

MONONGAHELA RIVER		
PITTSBURGH	PA.	1
HAYS	PA.	3
KANKIN	PA.	9
MARKHAM	PA.	10
DUQUESNE	PA.	12
NICKESPORTE	PA.	13
GLASSPORT	PA.	19
CLAIRTON	PA.	21
ELIZABETH	PA.	23
MONROVIA	PA.	29
SPRING	PA.	36
MONROE	PA.	80
GRACEMOUNT	PA.	83
ALLSPORT	PA.	87
HERVELL	PA.	87
BROWNVILLE	PA.	88
ALICIA	PA.	88
MORGANTHAU	W. VA.	100
FAIRMONT	W. VA.	100

[illegible]

ST LOUIS
1017 Olive St
Chestnut 1-4574

PITTSBURGH
3113 Grant Bldg
Atlantic 1-6300

CINCINNATI
Frank & Carr
Parkway 5767

CHICAGO
310 South Michigan Ave
Webster 9-5656

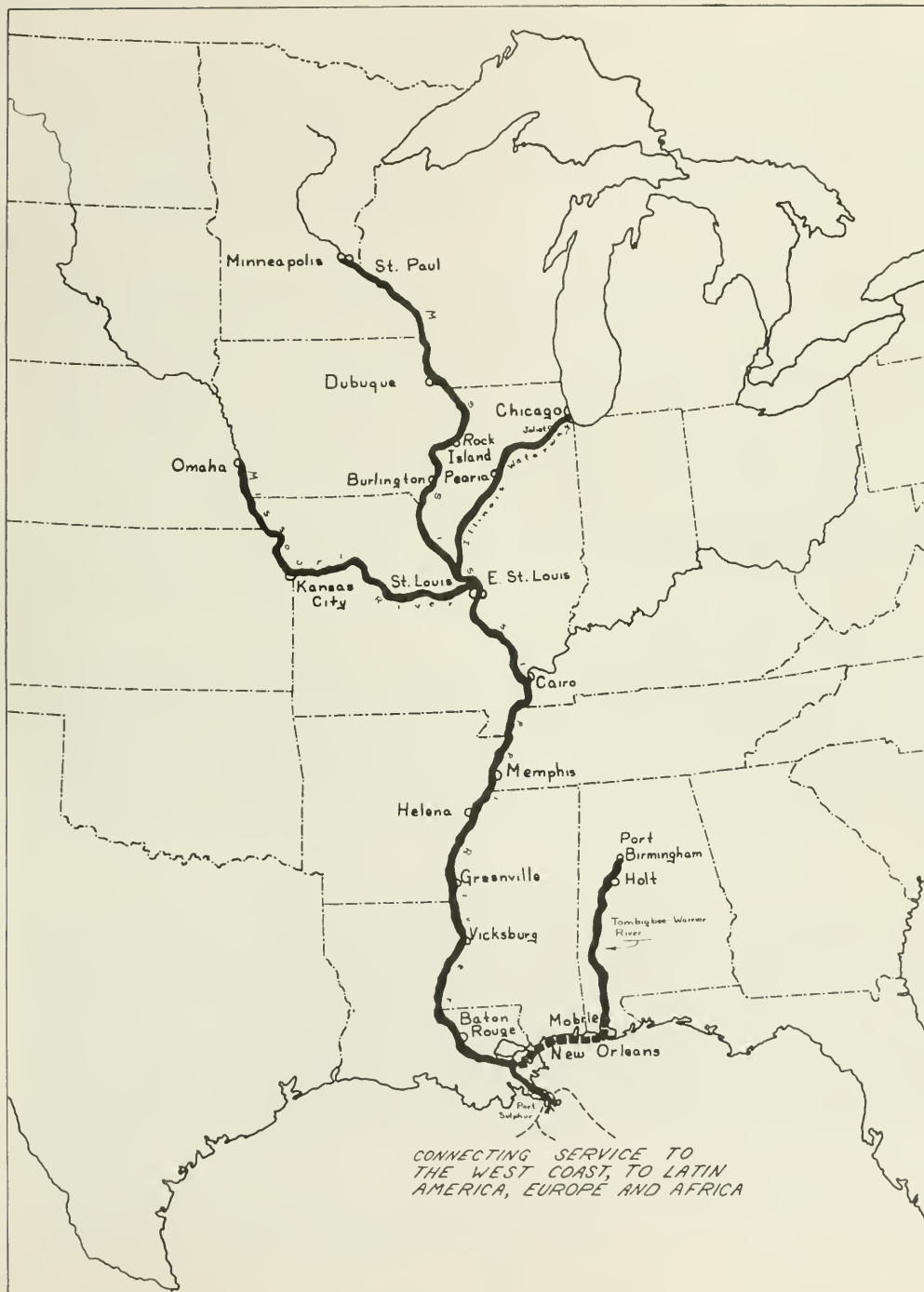
MEMPHIS
P O Box 413
8-2136

NEW ORLEANS
1215 Whitney Bldg.
Raymond 0245

HOUSTON
527 City Natl Bank Bldg
Airtex 4156

1031.2 below Cairo

ROUTES SERVED
BY
FEDERAL BARGE LINES
For Which All-Water Rates Are Named In This Schedule On Freight In BARGELOADS



CONNECTING SERVICE TO
THE WEST COAST, TO LATIN
AMERICA, EUROPE AND AFRICA



PHYSICAL CHARACTERISTICS

The Illinois Waterway is 327 miles long, and extends from Lake Michigan to the Mississippi River at Grafton. The Peoria and New LaGrange locks, built in 1936 and 1938 respectively, completed the construction of the waterway as it exists today. A minimum depth of nine feet is maintained for navigation by seven locks 110 feet wide and 600 feet long, * capable of handling 10,000 ton tows consisting of ten "standard" barges and a towboat.

The thirty-six miles section of the waterway extending from the locks at the mouth of the Chicago River to Lockport is made up of the Chicago River, the South Branch of the Chicago River, and the Chicago Sanitary and Ship Canal. This section traverses the metropolitan area of Chicago, and numerous bridges crossing it--many of them outmoded, having been built over forty years ago--precludes its use by large river craft. An alternate route to Lake Michigan, constructed in 1922 for sewage disposal, branches from the main canal just above Lemont. With a controlling width of only fifty feet and 16 miles long, the Sag Channel connects with the Lake via the Little Calumet River, 13 miles long. This section is narrow with sharp turns and is difficult to navigate. At Lockport the waterway follows the Des Plaines River to its confluence with the Kankakee to form the Illinois River. All the way to Ottawa, 94 miles, canalization has been performed, construction ranging from a retaining wall at Joliet to blasting through rock at numerous points between Brandon Road Locks and Ottawa.

In the 64-mile section between Lockport and Starved Rock, the waterway drops 137 feet through a series of five locks. The immediate difference in water level at each lock varies from 40 feet at Lockport to 18.5 feet at Starved Rock. In the remaining 232 miles to the Mississippi the Illinois River drops only 23 feet at low water stages. In two locations, one just south of Peoria and another eight miles south of Beardstown, movable dams maintain a nine-foot channel during periods of low water. For periods of high water the dams are lowered and tows proceed without stopping.

SUMMARY

Serving Chicago and connecting the Great Lakes and Mississippi River systems, the Illinois Waterway is strategically located. Currently the Illinois Waterway provides a medium of transport for more than 12,000,000 tons annually and its traffic has continued to increase in spite of handicaps and limitations inherent in the waterway as it now exists. The principal commodities moved are coal, sand and gravel, petroleum products, grain and sulphur. Twenty-five operators, common, contract and private, with a wide range of essential floating equipment have an established system of tariffs and rates. Thus, today, we find the Illinois Waterway an important traffic artery fixed to the largest transportation hub of the nation--Chicago.

* Corps of Engineers, U. S. Army, "Charts of the Illinois Waterway", Office of the District Engineer, Chicago, Illinois, 1948

One of the important features of the Illinois Waterways is that the U.S. Engineers keep the channel open and free of ice in the winter months giving us year 'round service.

Source: Commodity Origins, Traffic and Markets Accessible to Chicago Via the Illinois Waterway, by J. Edwin Becht, 1952.

ILLINOIS WATERWAY

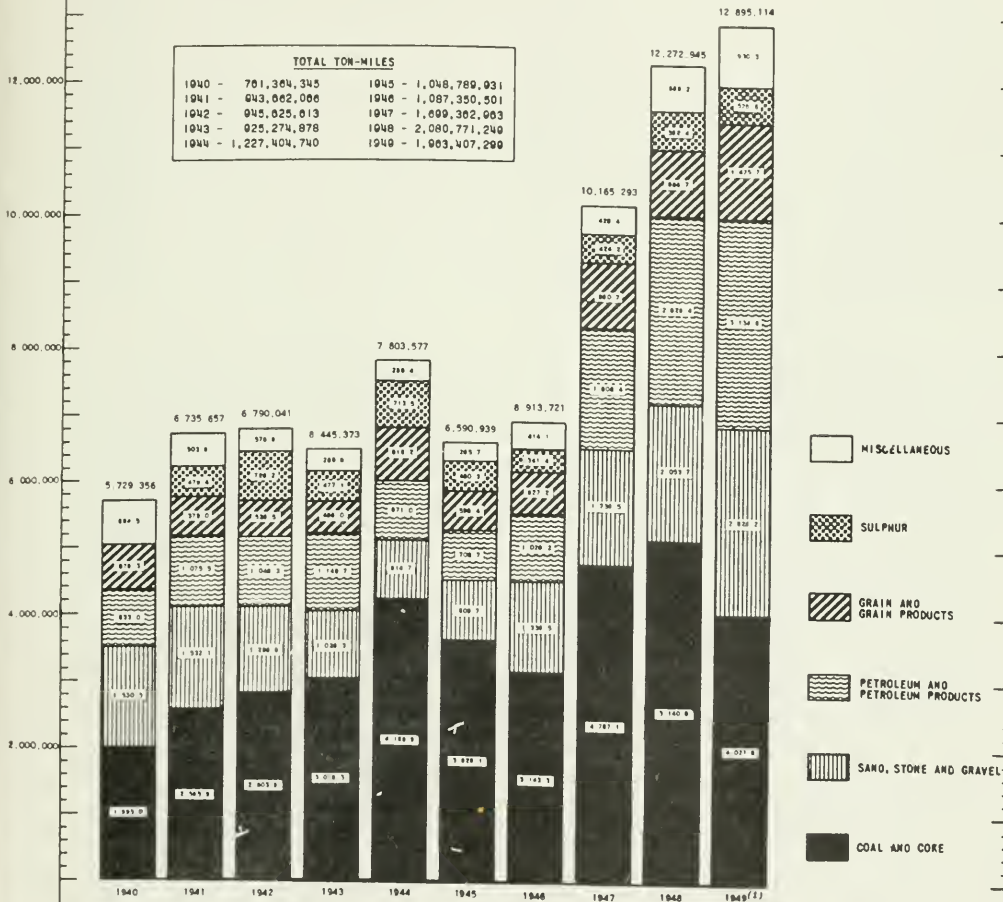
FROM MISSISSIPPI RIVER AT GRAFTON, ILLINOIS, TO TURNING BASIN NO. 8 ON CALUMET RIVER

VESSEL FREIGHT TRAFFIC - 1940 TO 1949

SHOWING VOLUME OF TOTAL TRAFFIC AND PRINCIPAL COMMODITIES

(COMMODITY TOTALS WITHIN BARS SHOWN IN THOUSANDS OF TONS)

TONS OF
2,000 LBS



Authorities: Annual Reports of Chief of Engineers, U.S. Army
(1) Preliminary figures supplied by Corps of Army Engineers



NET TONS AND TON-MILES CARRIED ON THE ILLINOIS WATERWAY
1935-1949 *

<u>Year</u>	<u>Net Tons</u>	<u>Ton-Miles</u>
1935	1,695,120	146,343,320
1936	2,171,374	174,875,544
1937	3,690,521	325,910,214
1938	4,446,513	393,988,943
1939	5,500,740	597,378,218
1940	5,729,356	761,364,345
1941	6,735,657	943,662,066
1942	6,790,041	945,625,613
1943	6,445,373	925,274,878
1944	7,803,577	1,227,404,740
1945	6,590,939	1,048,789,931
1946	6,913,721	1,087,350,501
1947	10,165,293	1,699,362,963
1948	12,272,945	2,080,711,000
1949	12,895,114	1,963,407,299

Table 14

PRINCIPAL COMMODITIES TRANSPORTED ON ILLINOIS WATERWAY 1948 **

<u>Commodity</u>	<u>Net Tons</u>	<u>% of Total</u>
Bituminous Coal	4,011,693	30.1
Gravel and Sand	2,795,060	21.5
Petroleum Products	2,007,641	15.5
Grain ***	1,523,702	12.0
Sulphur	528,488	4.0
Iron and Steel	335,676	3.0
All Others	1,692,853	13.0
Total	12,895,114	100.0

Table 15

* Corps of Engineers, U. S. Army

** Department of the Army, Corps of Engineers

*** Soybeans estimated as 200,000 tons. Data from Chicago Board of Trade, Statistical Department.



DIRECTION OF TRAFFIC ON THE ILLINOIS WATERWAY, 1942-1947 *

<u>Year</u>	<u>Northbound % of Total</u>	<u>Southbound % of Total</u>	<u>Total</u>
1942	87.6	12.4	100.0
1943	85.6	14.4	100.0
1944	85.7	14.3	100.0
1945	86.0	14.0	100.0
1946	82.6	17.4	100.0
1947	87.3	12.7	100.0

The movement of traffic is predominantly northbound. Less than 15 per cent of the total is southbound. This means that much empty equipment travels southward at a cost that must be charged to northbound shipments. A more balanced directional pattern of traffic would benefit shippers by making possible lower rates, and this would also strengthen the competitive position of the waterway carriers.

* Corps of Engineers, U. S. Army, Annual Reports to the Chief of Engineers, (Washington, D. C., 1942-1947).

Table 16

NET TONS OF TRAFFIC ON IMPORTANT INLAND WATERWAYS
OF THE UNITED STATES 1949*

<u>System</u>	<u>Net Tons</u>
Allegheny River	3,174,191
Atlantic Intra-coastal Waterway	3,736,358
Black Warrior, Warrior and Tombigbee System	2,058,504
Sulf Intro-coastal Waterway	27,866,339
<u>Illinois Waterway</u>	12,272,945
Kanawha and Elk Rivers	5,911,233
Mississippi River	57,148,268
Missouri River	810,507
Monongahela River	30,014,682
New York State Barge Canal	4,512,817
Ohio River	42,792,487
Sacramento River	1,541,508
Tennessee River	2,963,264
Willamette River	4,169,595

* American Waterways Operators, Inland Waterways--Facts and Figures,
(Washington, D. C., 1950), pages 15-18.

Table 17

CARRIERS

There are three types of carriers and operators performing line haul freight service on the Illinois Waterway: 1) common; 2) contract; and, 3) private. Common carriers offer their services to the general public for the transportation of nearly all kinds of freight at rates and charges published in tariffs on file with the Interstate Commerce Commission. Contract carriers carry freight, mainly bulk commodities, at rates that are not generally published but are individual agreements between shipper and carrier and vary with the volume and commodity under consideration. Terminal services of a switching nature are usually performed with contract arrangements based on the ton-miles to be hauled. Private carriers usually operate exclusively for a parent organization and carry commodities that are a component part of that company's business. On occasion they will act as contract carriers, but such arrangements are limited by time and certain combinations of conditions.

AIR TRANSPORTATION

The Greater Peoria Airport is owned and operated by the Greater Peoria Airport Authority, a municipal corporation. The airport is operated by revenue received from taxes and other sources, such as, airline rentals, building and office rentals, landing fees, and Air National Guard service fee, etc.

The airport property consists of approximately 900 acres, with about 460 being the usable landing area; the remainder being available for expansion. Headquarters of the 169th Fighter-Bomber Squadron is located at the airport.

Peoria is presently served by four airlines: American, Byerly Airlines, Ozark Airlines, and Trans-World Airlines. Charter service, flight instruction, aircraft sales and service is available through the facilities of Byerly Aviation, Inc., the fixed-base operator on the field. Aircraft repair and overhaul work is done by Aircraft Repair Service.

The Terminal Building houses the offices of the airlines, the Greater Peoria Airport Authority, the United States Weather Bureau, the airport snack bar, Civil Aeronautics Administration Maintenance Room for radio facilities on the field, and office of Control Tower Chief. The airport traffic control tower operates twenty-four hours a day. A complete lighting system enables aircraft operations to be carried out on a twenty-four hour basis.

The Authority has now acquired enough acreage to permit the future extension of the northwest runway for a distance believed to be adequate to care for the needs of civilian and military jet aircraft.

* See Bibliography.

ILLINOIS WATERWAY CARRIERS OPERATING IN CHICAGO - 1950

Class A Common Carriers *

	Freight Revenue		Net Tons Carried	
	1949	1948	1949	1948
American Barge Line Co., Inc.	\$5,639,257	\$5,533,471	1,530,738	1,560,260
Central Barge Company	2,459,958	2,395,471	3,386,742	3,861,030
Inland Waterway Corporation	8,560,151	8,316,507	2,505,496	2,702,819
John I. Hay Company	2,273,272	2,104,860	301,964	703,906
A. L. Mechling Barge Lines, Inc.	1,853,231	1,409,428	1,424,682	1,078,601
Ohio River Company	3,276,533	3,802,015	4,150,576	3,331,348

Class B Common Carriers *

Blaske Lines	623,746	550,788	600,752	590,299
Marine Transit Company	662,553	408,448	859,313	554,605

Contract Carriers **

Acme Petroleum Company
 Captain E. T. Bull
 Cargo Carriers, Inc.
 Chicago Towing Company
 James A. Harrnah, Inc.
 Ernst W. J. Seip

Private Carriers **

Avondale Refining Company
 A. J. Harrnah
 Illinois Farm Supply Company
 International Harvester Company
 Marquette Cement Manufacturing Company
 Martin Oil Service Company
 Pure Oil Company
 Standard Oil Company
 The Texas Oil Company
 Universal Atlas Cement Company

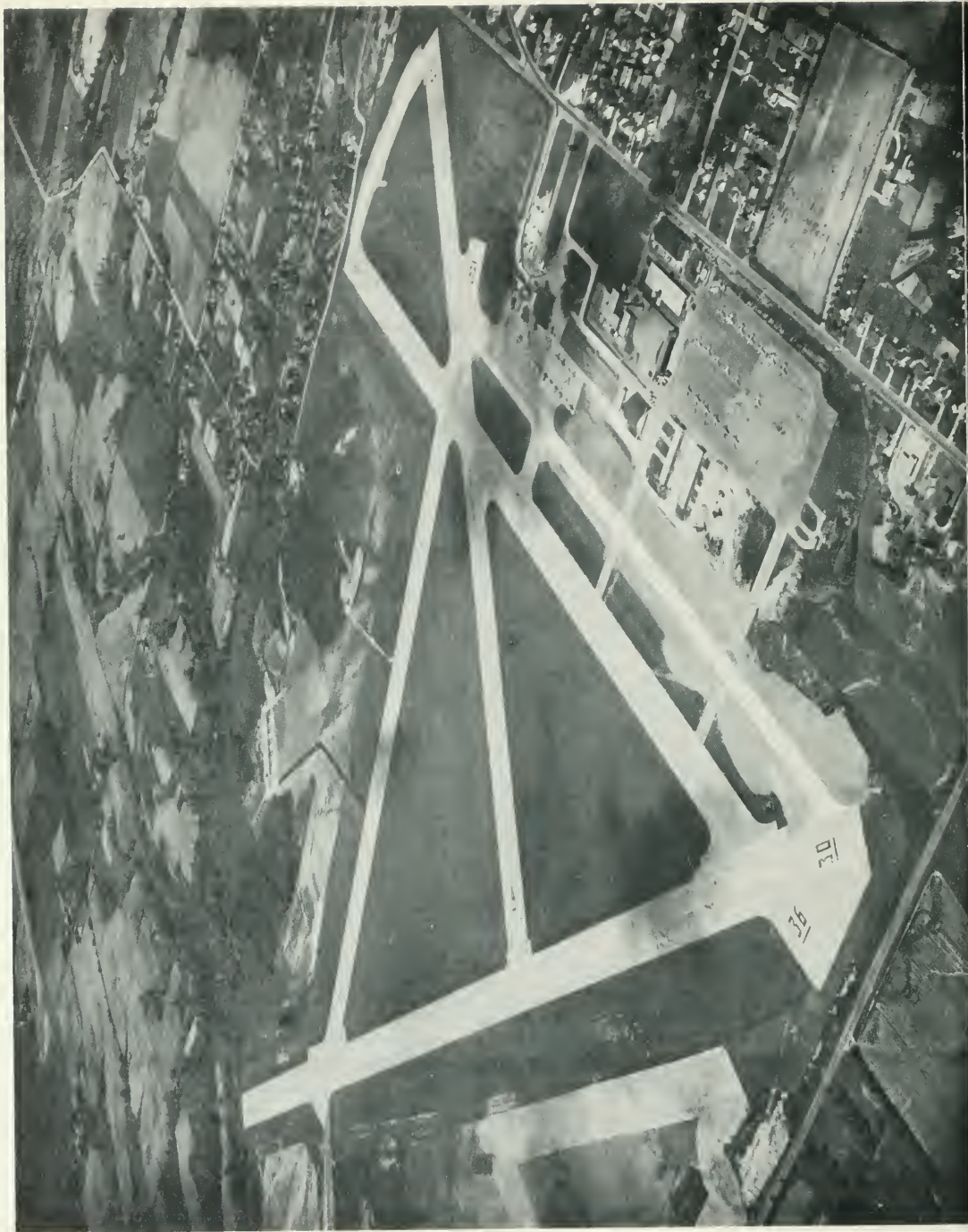
* Data for 1949 and 1948, Interstate Commerce Commission, Selected Financial and Operating Statistics From Annual Reports of Carriers By Inland Waterway and Coastal Waterways and Maritime Carriers, Years Ending 1948 and 1949 (Washington Government Printing Office, 1949 and 1950)--Class A Carriers average annual operating revenues exceeding \$500,000--Class B Carriers average annual operating expenses exceeding \$100,000 but less than \$500,000.

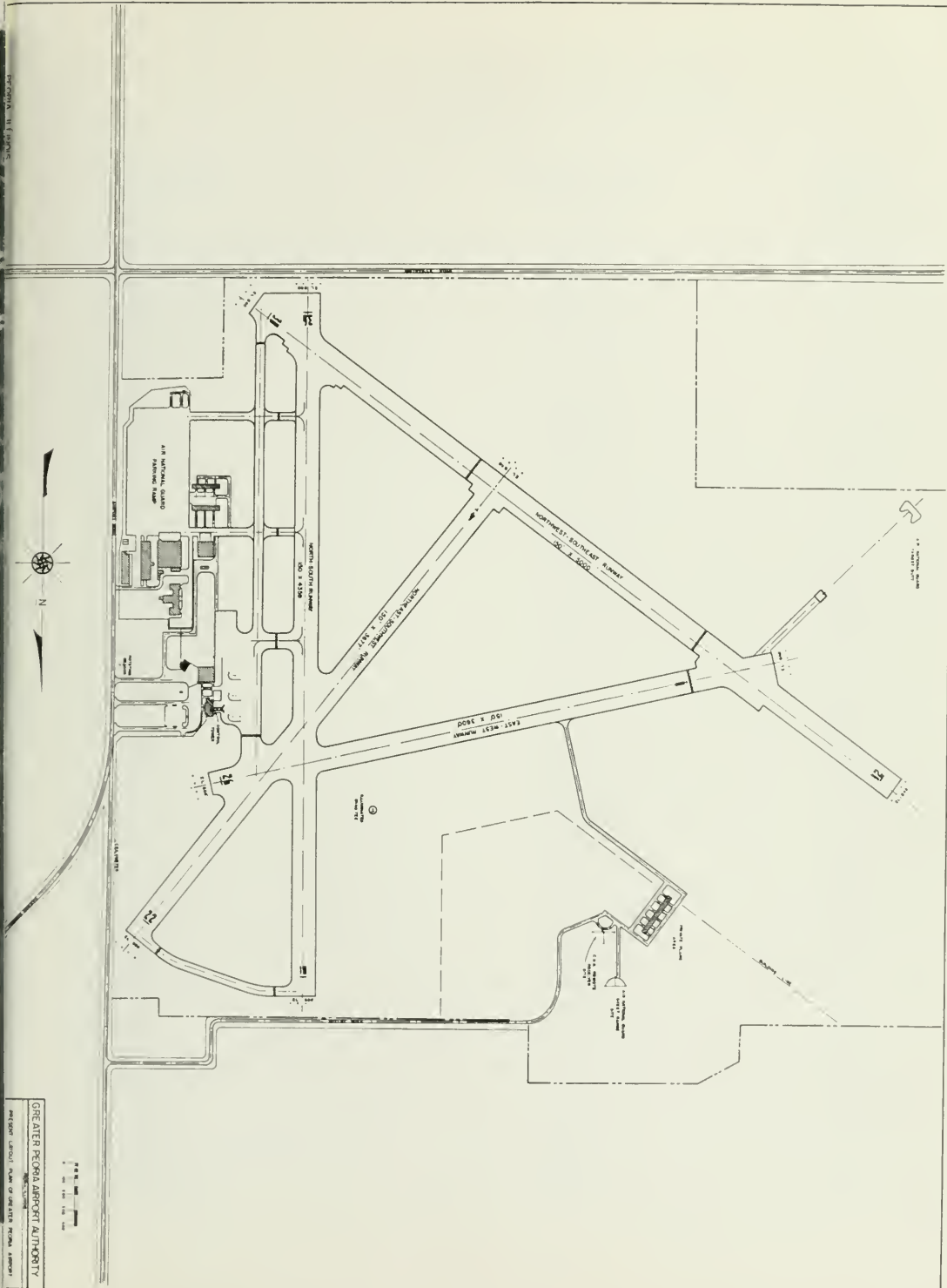
** Interstate Port Handbook, 1949, Rockwell F. Clancy Company, Chicago, 1949, page 56.

Table 18

Passengers carried during the year numbered 41,438, an increase of 23.5% over the preceding year.

Source: Mr. DeWitt Collins, Manager, Greater Peoria Airport.







TYPICAL FLIGHT SCHEDULE

to principal U. S. cities

<u>Destination</u>	<u>Leave Peoria</u>	<u>Arrive</u>
Akron	7:30 a.m.	12:22 p.m.
Albany	4:05 p.m.	10:04 p.m.
Atlanta, Georgia	2:47 p.m.	7:33 p.m.
Atlantic City	10:09 a.m.	5:33 p.m.
Baltimore	3:52 p.m.	9:35 p.m.
Birmingham	10:09 a.m.	7:30 p.m.
Boston	7:30 a.m.	1:25 p.m.
Buffalo	4:05 p.m.	8:57 p.m.
Chicago	10:09 a.m.	10:55 a.m.
Cincinnati	10:09 a.m.	1:46 p.m.
Cleveland	7:30 a.m.	10:35 a.m.
Columbus	3:52 p.m.	7:00 p.m.
Dallas	4:05 p.m.	9:00 p.m.
Dayton	3:52 p.m.	6:16 p.m.
Denver	10:09 a.m.	3:55 p.m.
Des Moines	9:14 p.m.	11:15 p.m.
Detroit	4:05 p.m.	6:43 p.m.
Indianapolis	2:47 p.m.	5:18 p.m.
Kansas City	3:34 p.m.	5:27 p.m.
Little Rock	2:47 p.m.	10:01 p.m.
Los Angeles	10:09 a.m.	7:45 p.m.
Louisville	5:15 p.m.	8:36 p.m.
Memphis	8:37 a.m.	11:28 a.m.
Miami	7:30 a.m.	1:55 p.m.
Milwaukee	9:14 p.m.	11:07 p.m.
Minneapolis	10:09 a.m.	1:47 p.m.
Moline	9:14 a.m.	9:51 a.m.
Nashville	5:15 p.m.	9:46 p.m.
New Orleans	7:30 a.m.	1:58 p.m.
New York	7:30 a.m.	11:55 a.m.
Omaha	9:14 p.m.	12:45 p.m.
Oklahoma City	8:37 a.m.	1:22 p.m.
Philadelphia	4:05 p.m.	10:05 p.m.
Pittsburgh	4:05 p.m.	7:27 p.m.
Phoenix	10:09 a.m.	7:25 p.m.
Portland, Oregon	10:09 a.m.	10:15 p.m.
Rochester, New York	7:30 a.m.	12:07 p.m.
St. Louis	8:37 a.m.	9:50 a.m.
Salt Lake City	5:15 p.m.	3:05 a.m.
San Diego, California	10:09 a.m.	8:05 p.m.
San Antonio	4:05 p.m.	11:00 p.m.
San Francisco	4:05 p.m.	12:55 p.m.

TYPICAL FLIGHT SCHEDULE

to principal U. S. cities

(continued)

<u>Destination</u>	<u>Leave Peoria</u>	<u>Arrive</u>
Seattle	10:09 a.m.	8:55 p.m.
Springfield, Missouri	2:57 p.m.	7:49 p.m.
Syracuse, New York	7:30 a.m.	12:49 p.m.
Toledo	7:30 a.m.	1:04 p.m.
Tulsa	8:37 a.m.	1:10 p.m.
Tucson	10:09 a.m.	6:25 p.m.
Washington, D. C.	4:05 p.m.	8:45 p.m.
Wichita	3:52 p.m.	6:47 p.m.

Source: Annual Report (1953-1954), Greater Peoria Airport Authority.

AIRLINE SCHEDULES
EFFECTIVE OCTOBER 19, 1954

AA-American Airlines	7-3555
Byerly Airlines	7-3503
OZA -Ozark Air Lines	7-6631
TWA-Trans World Airlines	7-4449

Flight No.	Time of Departure From	Arrive Peoria	Leave Peoria	Name of Airline	Arrival Time At	
2	6:45 am Jacksonville	7:20 am	7:30 am	Byerly	Chicago	8:30 am
**11	7:00 am Davenport-Moline	7:35 am	7:38 am	OZA	Springfield-St. Louis	8:51 am
60	7:30 am Springfield	7:58 am	8:01 am	OZA	Chicago	8:52 am
**10	8:15 am St. Louis-Springfield	9:26 am	9:29 am	OZA	Moline-Rockford-Milwaukee	11:21 am
#353	8:47 am Chicago	9:39 am		TWA	Terminates -Peoria	
3	9:00 am Chicago	10:00 am	10:10 am	Byerly	Jacksonville-	10:45 am
#410	Originates at Peoria		10:15 am	TWA	Chicago	11:05 am
61	11:00 am Chicago	11:56 am	11:59 am	OZA	Springfield-	12:28 pm
64	12:00 Noon-Springfield	12:28 pm	12:31 pm	OZA	Chicago	1:22 pm
15	12:30 pm-Milwaukee-Rockford-Moline	2:30 pm	2:33 pm	OZA	Springfield-St. Louis	3:46 pm
12	1:30 pm-St. Louis-Springfield	2:41 pm	2:44 pm	OZA	Moline-Rockford-Milwaukee	4:36 pm
484	1:40 pm-St. Louis	2:55 pm	3:05 pm	AA	Chicago	3:53 pm
260	1:40 pm-Kansas City	3:09 pm	3:21 pm	TWA	Chicago	4:10 pm
365	3:25 pm-Chicago	4:17 pm	4:29 pm	TWA	Kansas City-	6:07 pm
4	4:30 pm-Jacksonville	5:05 pm	5:15 pm	Byerly	Chicago	6:15 pm
65	5:00 pm-Chicago	5:56 pm		OZA		
66			6:30 pm	OZA	Chicago	7:21 pm

Daily-except Saturday

**Daily-except Sunday

AIR LINES SERVING PEORIA

Passenger:

American Airlines, Inc.
Byerly Aviation Inc.
Ozark Airlines Inc.
Trans-World Airlines, Inc.

Freight:

Midwest Air Export Service
Trans-World Airlines, Inc.
American Airlines, Inc.

Charter:

Byerly Aviation, Inc.
Howard Aviation, Inc.

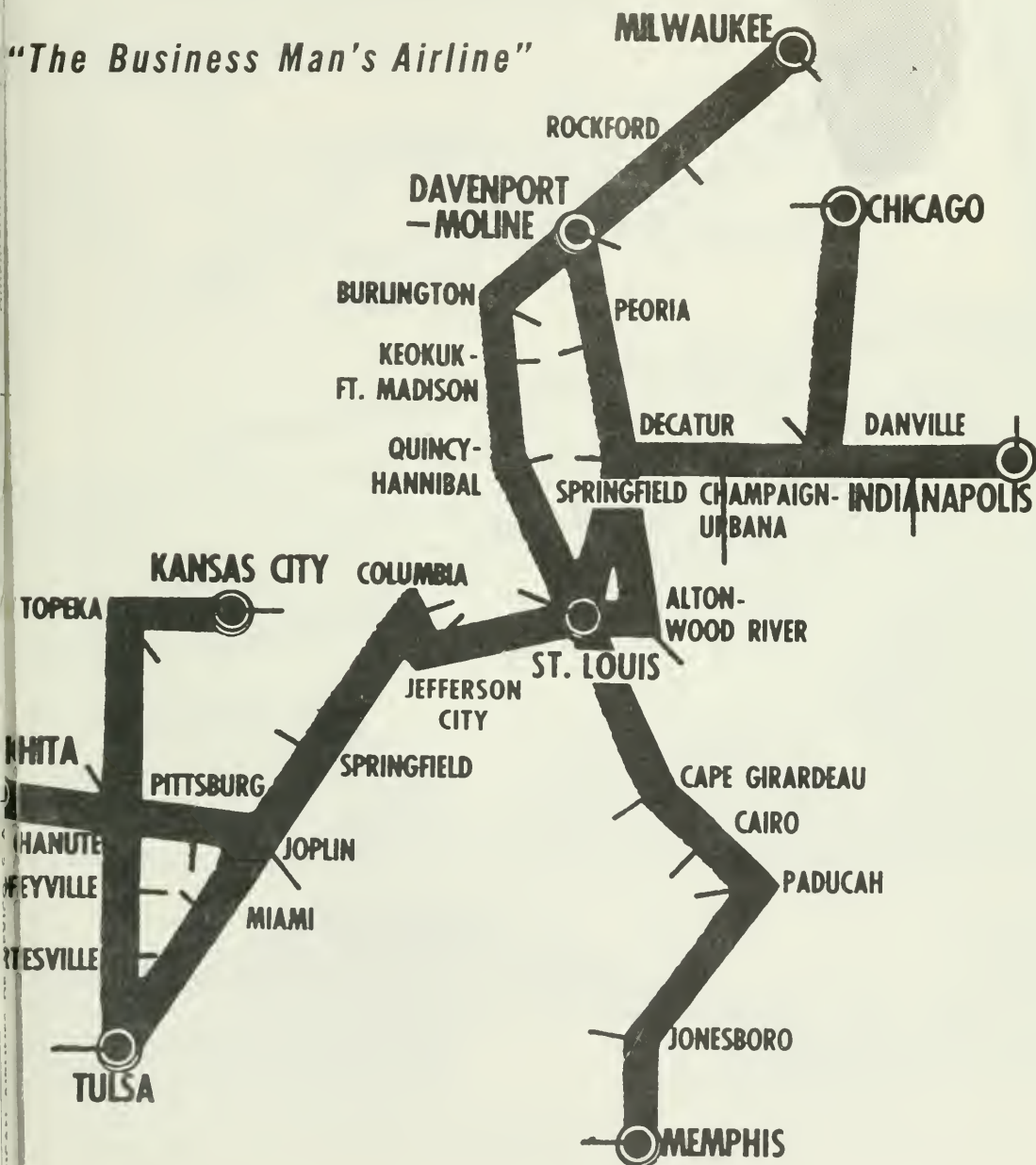
System Map

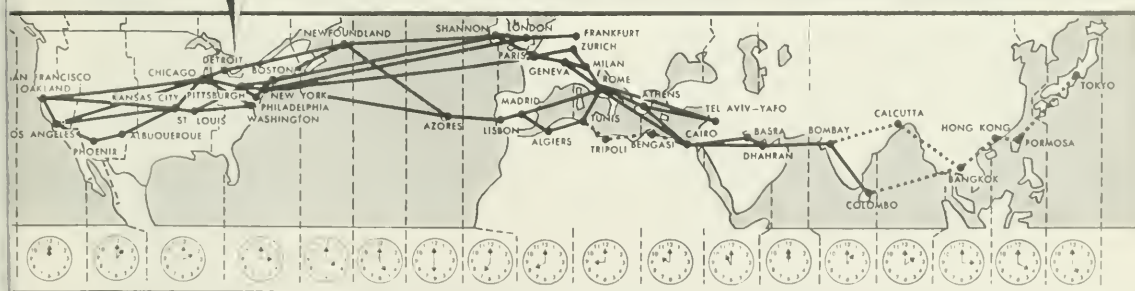


AMERICAN AIRLINES, Inc.

OZARK AIR LINES Effective July 1, 1954

"The Business Man's Airline"





AMERICAN AIR LINES, INC., GREATER PEORIA AIRPORT, PEORIA, ILLINOIS
As of August 1, 1954

Passenger fare and cargo rate from Peoria to Major Midwest Cities:

<u>Name of City</u>	<u>Passenger Fare</u>	<u>Freight Cargo Rate Per CWT</u>
Akron, Ohio	\$28.85	\$ 9.56
Birmingham, Alabama	50.08	13.58
Charleston, South Carolina	36.00	13.58
Chattanooga, Tennessee	43.15	10.88
Chicago, Illinois	8.85	
Cincinnati, Ohio	26.45	5.27
Cleveland, Ohio	28.85	9.56
Columbus, Ohio	28.25	5.41
Davenport, Iowa	4.85	7.68
Dayton, Ohio	23.90	4.86
Denver, Colorado	56.30	16.22
Des Moines, Iowa	29.20	9.56
Detroit, Michigan	24.10	5.27
Duluth, Minnesota	43.20	none
Evansville, Indiana	26.75	8.68
Grand Rapids, Michigan	18.00	8.18
Indianapolis, Indiana	19.85	9.56
Kansas City	18.60	4.30
Knoxville, Tennessee	40.85	10.38
Little Rock, Arkansas	35.75	10.28
Louisville, Kentucky	26.75	9.56
Madison, Wisconsin	17.35	7.78
Memphis, Tennessee	27.70	8.68
Milwaukee, Wisconsin	16.60	4.78
Minneapolis, Minnesota	32.10	8.78
Nashville, Tennessee	36.15	10.15
Oklahoma City, Oklahoma	38.35	7.58
Omaha, Nebraska	36.50	10.62
Pittsburgh, Pennsylvania	35.10	6.99
Rockford, Illinois	7.90	7.68
Springfield, Missouri	21.75	4.78
St. Louis, Missouri	9.70	4.78
Terre Haute, Indiana	20.35	7.93
Toledo, Ohio	23.55	9.56
Topeka, Kansas	22.25	4.86
Toronto, Canada	38.35	7.58
Tulsa, Oklahoma	31.50	6.42
Wichita, Kansas	30.30	6.48
Youngstown, Ohio	31.55	10.11

Federal Tax not included in above rates. All rates one-way.

MONTHLY TRAFFIC SUMMARY
(continued)

1952 served by American, TWA, and Ozark.

Year	Passengers		Mail-lbs.		Express-lbs.		Freight-lbs.	
	On	Off	On	Off	On	Off	On	Off
1952								
January	1008	1035	9809	6077	18420	14324	36905	5323
February	1043	1025	10254	6294	15865	14412	47465	11436
March	1113	1097	9940	5339	18658	17131	54139	11740
April	1444	1441	10986	5479	17934	19869	47804	8806
May	1493	1293	10392	6520	24087	10592	18074	7629
June	1502	1380	9748	5937	22133	9791	58118	11799
July	1466	1258	9390	5259	22563	6217	40205	13075
August	1529	1494	10612	5379	27983	7132	47596	9495
September	1666	1480	11303	5571	26975	8369	41639	11652
October	1928	1772	11261	6605	30305	15626	42436	20402
November	1443	1369	9965	5644	22030	12184	30484	9712
December	1205	1040	12271	6440	16851	6378	24111	7353
Totals:	16840	15684	125931	70544	263804	142025	488976	128422
1953	1953 served by American, TWA, and Ozark							
January	1133	1109	9821	5509	11955	9134	27642	6477
February	1467	1426	10697	6260	13794	13597	32143	7439
March	1465	1367	10935	6057	14874	17477	28419	11328
April	1774	1657	11909	7628	18098	17794	28153	11949
May	1805	1712	11479	7532	22481	15676	33044	13407
June	1979	1820	11662	5870	23494	22471	25947	15202
July	1891	1719	11433	4654	24234	13459	34830	14290
August	1934	1806	10152	4349	23484	17016	24275	11607
September	1925	1883	11188	5072	22856	16586	33691	9765
October	1982	1802	11790	6220	23205	19790	26716	11519
November	1770	1627	10026	4822	16779	12101	28490	10091
December	1677	1623	10593	7159	14538	11773	28300	15153
Totals:	20802	19551	131685	71132	229792	186874	351650	138227
1954	1954 served by American, TWA, and Ozark							
January	1463	1384	7645	4295	9494	8775	20394	7488
February	1649	1724	9805	5675	13723	19923	23030	8094
March	1813	1784	10153	6039	16964	10011	20128	6321
April	2019	1916	9681	6279	14757	12562	19474	8349
May	1999	1951	8567	5823	12767	10148	17011	18180
June	2200	1956	8914	5919	16790	9284	24047	19357
Totals:	11143	10715	54765	34030	84495	70703	124084	67789

Table 20

MT. HAWLEY AIRPORT

Mt. Hawley Airport is a small, privately-owned field, six and one-half miles north of Peoria on Route 88. It has three grass runways, varying from 3300 to 2640 feet long. It is lighted upon request, and affords general maintenance and major repairs. The operator is Howard Aviation, Inc., Mr. F. C. McLaughlin, Manager. They are dealers in Navion and Cessna aircraft.

POSTAL SERVICE

There are two main post offices in the Peoria area, one each in Peoria and in Pekin. In addition, there are branch post offices in Bartonville, East Peoria, Bellevue, Creve Coeur, El Vista, Norwood Park, and Peoria Heights and sixteen postal sub-stations throughout Peoria.

Tables 21 and 22 on pages 326 and 327 respectively show delivery time of first-class mail and parcel post rates to major midwest cities, and letter cancellations and dispatches of parcel post.

Recent inauguration of highway post office service between Peoria and Davenport, Iowa, and Peoria and Mattoon has greatly improved our service to the west and also to St. Louis-Memphis, New Orleans, and other southern cities.

DELIVERY TIME OF FIRST CLASS MAIL AND PARCEL POST RATES

<u>City</u>	<u>Arrival (next day unless noted)</u>	<u>Parcel Post Rates for 50 pounds</u>
Akron, Ohio	7:00 p.m.	\$3.63
Birmingham, Alabama	7:00 a.m. *	3.63
Charleston, South Carolina	9:00 p.m. *	4.80
Chattanooga, Tennessee	2:45 a.m. *	3.63
Chicago, Illinois	12:10 a.m.	2.17
Cincinnati, Ohio	5:15 p.m.	2.76
Cleveland, Ohio	5:30 p.m.	3.63
Columbus, Ohio	5:30 p.m.	3.63
Davenport, Iowa	1:35 a.m.	2.17
Dayton, Ohio	7:35 p.m.	2.76
Denver, Colorado	11:55 p.m.	4.80
Des Moines, Iowa	5:00 a.m.	2.76
Detroit, Michigan	4:50 p.m.	3.63
Duluth, Minnesota	12:30 p.m.	3.63
Evansville, Indiana	1:55 p.m.	2.76
Grand Rapids, Michigan	9:05 p.m.	2.76
Indianapolis, Indiana	1:10 p.m.	2.76
Kansas City, Kansas	9:00 a.m.	2.76
Knoxville, Tennessee	3:50 a.m. *	3.63
Little Rock, Arkansas	8:25 p.m.	3.63
Louisville, Kentucky	8:00 p.m.	2.76
Madison, Wisconsin	9:40 a.m.	2.76
Memphis, Tennessee	4:30 p.m.	3.63
Milwaukee, Wisconsin	2:55 a.m.	2.76
Minneapolis, Minnesota	8:00 a.m.	3.63
Nashville, Tennessee	6:40 p.m.	3.63
Oklahoma City, Oklahoma	5:25 p.m.	3.63
Omaha, Nebraska	8:15 a.m.	2.76
Pittsburg, Pennsylvania	9:20 p.m.	3.63
Rockford, Illinois	7:30 a.m.	2.17
Springfield, Missouri	10:25 p.m.	2.76
St. Louis, Missouri	3:00 a.m.	2.17
Terre Haute, Indiana	11:50 a.m.	2.76
Toledo, Ohio	2:55 p.m.	3.63
Topeka, Kansas	9:25 a.m.	3.63
Toronto, Canada	about third day	11.23
Tulsa, Oklahoma	2:00 p.m.	3.63
Wichita, Kansas	1:00 p.m.	3.63
Youngstown, Ohio	7:30 p.m.	3.63

All arrivals based on arrival at Peoria Post Office at 5:30-6:30 p.m.

* Second day.

Table 21

PEORIA, ILLINOIS, POST OFFICE
First Class Post Office

<u>Month 1953</u>	<u>Cancellations (includes metered, etc.)</u>	<u>Outside Pieces of Parcel Post Dispatched</u>	<u>Sacks of Parcel Post Dispatched</u>
January	4,288,988	3,521	15,468
February	4,488,841	3,362	14,505
March	4,359,110	3,712	16,834
April	5,051,520	3,625	15,731
May	4,012,191	3,597	14,684
June	4,076,911	4,030	16,135
July	3,826,170	2,816	14,587
August	3,900,516	3,673	15,141
September	4,018,616	3,320	15,349
October	4,585,535	3,633	18,213
November	4,289,512	2,994	19,693
December	7,916,973	3,127	30,419
	<hr/>	<hr/>	<hr/>
Totals for Calendar Year	54,814,883	41,411	206,759

Table 22

WAREHOUSES

The Peoria Metropolitan Area has three major merchandise warehouses, offering all the usual services of such establishments. The Federal Warehouse Company and United Facilities Incorporated are located in Peoria; Kriegsman Transfer Company is located in Pekin. Following are statistics on these warehouses:

	<u>Square Feet</u>	<u>Floors</u>	<u>Car Capacity</u> <u>Private Siding</u>	<u>Number of Railroads</u> <u>Serving Warehouse</u>
Kriegsman	150,000	1	24	2
Federal	150,000	7	*	2
United Facilities	125,000	6	6	1

All of the above warehouses are sprinklered, heated, and of brick construction. The Federal Warehouse Company also has 30,000 square feet of non-fire proof, unheated space.

* Not listed.

CHAPTER X

LIVING COSTS AND STANDARDS

COST OF LIVING

Interpretation of Changes in Cost of Living ---

The cost of living figures given in Table 1 cannot be used for comparison between cities as each city's food costs from 1935 to 1939 were averaged and the figure so obtained established as 100%. Therefore, the only thing which can be used for comparison is the amount of change in each city's cost of living from year to year.

For example, examining the figures for the United States, it will be seen that from 1929 to 1932 the index fell 46.0 points, from 1932 to 1939 it went up 8.7 points, from 1939 to 1941 it went up 10.3 points, etc. The United States total has been going up continuously since the period from 1932 to 1939. This same continued raise is true for all the cities in the Table except Peoria, Chicago and Cleveland.

The interesting point to note is that Peoria's index went up less in 1949 to 1950 than six of the cities, and the same as the other three. In 1951 to 1952, it went down, whereas six went up, and the other two went down very small amounts, Peoria's going down 5.4 points. Data on clothing, shelter, utilities, distribution of income, etc., reflecting to a certain extent on cost of living are found in the chapters bearing these titles in this report.

Table 1

COST OF LIVING

Indexes of Retail Prices of Foods, by City: 1929 to 1952.

	<u>1929</u>	<u>1932</u>	<u>1939</u>	<u>1941</u>	<u>1945</u>	<u>1949</u>	<u>1950</u>	<u>1951</u>	<u>1952</u>
United States	132.5	86.5	95.2	105.5	139.1	201.9	204.5	227.4	229.9
Chicago	133.2	87.5	94.9	106.2	137.8	207.4	209.4	233.3	232.1
Cincinnati	135.1	83.9	92.3	105.0	137.6	201.5	206.2	227.9	232.6
Cleveland	131.1	82.4	96.3	107.7	143.2	209.0	211.4	235.0	234.3
Columbus	131.5	83.6	92.3	102.2	131.5	184.3	186.5	207.6	214.1
Detroit	133.9	78.8	93.7	104.9	135.6	196.6	203.5	229.3	230.7
Indianapolis	138.3	85.5	93.5	106.3	135.4	197.9	201.5	223.6	225.0
Milwaukee	131.6	87.1	93.7	104.0	137.4	202.2	206.8	228.2	230.1

Table 1 (cont'd)

	<u>1929</u>	<u>1932</u>	<u>1939</u>	<u>1941</u>	<u>1945</u>	<u>1949</u>	<u>1950</u>	<u>1951</u>	<u>1952</u>
PEORIA	128.6	81.8	96.0	108.2	143.3	212.4	216.9	238.0	232.6
Springfield	131.7	81.7	95.5	105.6	144.2	208.0	213.3	238.4	240.6

1929 - 1951 - August figures; 1952 - December figures
 1935-39 average - 100

This index does not measure relative differences in prices or living costs between cities.

Source: Statistical Abstract of the United States - 1953

Table 2

* CHANGES IN COST OF LIVING

	1929- 1932	1932- 1939	1939- 1941	1941- 1945	1945- 1949	1949- 1950	1950- 1951	1951- 1952
U. S.	-46.0	+8.7	+10.3	+33.6	+62.8	+2.6	+22.9	+2.5
Chicago	-45.7	+7.4	+11.3	+31.6	+69.6	+2.0	+23.9	-1.2
Cincinnati	-51.2	+8.4	+12.7	+32.6	+63.9	+4.7	+21.7	+4.7
Cleveland	-48.7	+13.9	+11.4	+35.5	+65.8	+2.4	+23.6	-0.7
Columbus	-47.9	+8.7	+9.9	+29.3	+52.8	+2.2	+21.1	+6.5
Detroit	-55.1	+14.9	+11.2	+30.7	+61.0	+6.9	+25.8	+1.4
Indiana- polis	-52.8	+8.0	+12.8	+29.1	+62.5	+3.6	+22.1	+1.4
Milwaukee	-44.5	+6.6	+10.3	+33.4	+64.8	+4.6	+21.4	+1.9
PEORIA	-46.8	+14.2	+12.2	+35.1	+69.1	+4.5	+21.1	-5.4
Springfield	-50.0	+13.8	+10.1	+38.6	+63.8	+5.3	+25.1	+2.2

* Each period change indicated above based on comparison with period just preceding it.

Source: Table 1

CHAPTER XI

CONSTRUCTION AND REAL ESTATE

CONSTRUCTION AND REAL ESTATE

As in the case in other characteristics of the Peoria Metropolitan Area, the status of local construction and real estate is best measured by a comparison with other similar metropolitan areas. The housing situation in Peoria will here be compared to those in the Standard Metropolitan Areas of Evansville, Indiana, Rockford, Illinois; Fort Wayne, Indiana; Davenport-Rock Island-Moline, and South Bend, Indiana. These areas were chosen for their size, industrial pattern and location. Tables of comparison may be found on the following pages. The latest detailed data concerning housing is available in the 1950 Census of Housing; this data will be considered first.

Although the Peoria area ranked fifth among the cities studied, in owner occupied building activity between 1945 and 1950, the difference between the third, fourth and fifth ranked cities was not significant. (See Table 1) Ranking below only South Bend and Fort Wayne, 64.4% of all housing units in the Peoria Area were owner occupied. (from Table 2) In total residential building activity between 1945 and 1950, Peoria was third highest with 12.3% of the total number of dwelling units now in the area, built during this period. (Table 4)

A serious deficiency is pointed out by the fact that Peoria has the second highest percentage of delapidation. (Table 6) Steps have been taken since 1950 to remedy this situation however. Most of this improvement has come through the construction of 514 public housing units, the construction of which replaced many of the delapidated houses.

As shown in Tables 6 and 10, Peoria has the second highest percentage of housing utilizing non-central heating systems; the next to lowest percentage of dwelling units with private bath and hot running water; the second highest percentage of housing with only cold running water, lacking toilet or bath and in houses totally lacking running water. The significance of this data may be tempered, to an extent, by the inclusion of a large farming area in the Standard Metropolitan Area.

With respect to the other five cities, Peoria's housing facilities are relatively overcrowded. Although the area has the highest percentage of dwellings housing one person per dwelling unit (Table 15) it has next to the lowest percentage of dwellings housing .75 persons or fewer per room, a criteria frequently employed in comparisons of dwelling density.* (Table 11)

Table 5 shows Peoria with a high percentage of one dwelling units, detached houses and a comparatively high percentage of housing in the ten to nineteen

* These figures are not incompatible, rather they represent both extremes in dwelling density, Peoria is relatively high in proportion of both overcrowded and of spacious dwellings

dwelling units category. In the intermediate categories the area ranks low. As in the other cities compared, the largest concentration of rent payments in Peoria is in the 10-14 percent of income category. Table 12 shows the even distribution of gross rent in the area. Among the cities compared, Peoria has the lowest percentage of rental facilities taking from 10 to 14 percent of the occupants income.

TABLE 1

PERCENTAGES OF OWNER AND RENTER OCCUPIED DWELLING UNITS
FOR SELECTED STANDARD METROPOLITAN AREAS, 1950

AREA	TOTAL DWELLING UNITS	OWNER OCCUPIED	PER CENT OWNER OCCUPIED	RENTER OCCUPIED	PER CENT RENTER OCCUPIED
PEORIA	67,360	43,350	64.4	24,010	35.6
Evansville	44,945	26,135	58.1	18,810	41.9
Fort Wayne	49,870	33,785	67.7	16,085	32.3
South Bend	54,280	39,590	72.9	14,690	27.1
Davenport- R. I. - Moline	62,425	37,450	59.9	24,975	40.1
Rockford	41,970	24,950	59.4	17,020	40.6

Source: U. S. Bureau of the Census, U. S. Census of Housing, 1950, Non-farm Housing Characteristics (Washington, C. C.: U. S. Government Printing Office, 1952), Vol. II, Chap. 69, Table A-5 for respective metropolitan areas.

TABLE 2

OWNER OCCUPIED DWELLING UNITS, FOR STANDARD METROPOLITAN
AREAS BY YEAR BUILT

METRO- POLITAN	TOTAL UNITS	1945 OR LATER		1940 TO 1944		1939 OR EARLIER		NOT REPORTED	
		No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
PEORIA	43,350	7,254	16.7	3,988	9.2	31,188	71.9	921	2.1
Evansville	26,135	4,408	16.9	2,867	11.0	18,462	70.6	400	1.5
Fort Wayne	33,785	5,664	16.8	2,833	8.4	24,830	73.5	459	1.3
South Bend	39,590	7,332	18.5	3,495	8.8	27,982	70.7	780	2.0
Davenport- R. I. - Moline	37,450	5,918	15.8	3,587	9.5	27,333	72.9	615	1.6
Rockford	24,950	4,435	17.7	2,962	10.6	17,088	68.4	464	1.8
Source: Same as above									

TABLE 3

RENTER OCCUPIED DWELLING UNITS, FOR STANDARD METROPOLITAN
AREAS BY YEAR BUILT

METRO- POLITAN AREA	TOTAL UNITS	1945 OR LATER		1940 TO 1944		1939 OR EARLIER		NOT REPORTED	
		No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Peoria	24,010	1,027	4.3	1,455	6.1	20,393	84.9	1,237	5.1
Evansville	18,810	880	4.7	2,430	12.9	14,939	79.4	553	2.9
Fort Wayne	16,085	599	3.7	610	3.8	14,373	89.4	503	3.1
South Bend	14,690	837	5.7	1,015	6.9	11,814	80.4	1,030	7.0
Davenport- R. I. - Moline	24,975	1,049	4.2	1,010	4.0	22,249	89.0	667	2.6
Rockford	17,020	812	4.7	906	5.3	12,517	73.5	2,787	16.3

Source: U. S. Census of Housing, Housing 1950.

TABLE 4

OWNER AND RENTER OCCUPIED DWELLING UNITS, FOR STANDARD
METROPOLITAN AREAS BY YEAR BUILT

METRO- POLITAN AREA	TOTAL UNITS	1945 OR LATER		1940 TO 1944		1939 OR EARLIER		NOT REPORTED	
		No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Peoria	67,360	8,281	12.3	5,433	8.1	51,581	76.6	2,158	3.2
Evansville	44,945	5,288	11.8	5,297	11.8	33,401	74.3	953	2.1
Fort Wayne	49,870	6,263	12.6	3,443	6.9	39,203	78.6	962	1.9
South Bend	54,280	8,169	15.0	4,510	8.3	39,796	73.3	1,810	3.3
Davenport- R. I. - Moline	62,425	7,049	11.2	4,554	7.2	49,476	79.2	1,312	2.1
Rockford	41,970	5,247	12.5	3,868	9.2	29,605	70.5	3,251	7.7

Source: Same as above

TABLE 5

RENTER OCCUPIED DWELLING UNITS, FOR STANDARD METROPOLITAN AREAS BY STRUCTURE TYPE

METRO- POLITAN AREA	TOTAL UNITS	1 Dwelling Unit		Other 1 and 2 Dwelling Units		3 and 4 Dwelling Units		5 to 9 Dwelling Units		10 to 19 Dwelling Units		20 Dwelling Units Or More	
		No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Peoria	24,010	9,800	40.8	5,730	23.9	3,730	15.5	2,905	12.1	1,455	6.1	390	1.6
Evansville	18,810	6,820	36.3	5,225	27.8	3,335	17.7	2,405	12.8	900	4.8	125	.7
Fort Wayne	16,085	5,250	32.6	5,590	34.8	3,245	20.2	1,325	8.2	260	1.6	415	2.6
South Bend	14,695	5,875	40.0	4,360	29.7	2,760	18.8	1,110	7.6	310	2.1	280	1.9
Davenport, RI, Moline	24,975	8,165	32.6	7,715	30.8	4,365	17.4	3,010	12.0	1,150	4.6	570	2.2
Rockford	17,020	4,845	28.4	6,020	35.3	3,345	19.6	1,975	11.6	610	3.5	225	1.3

Source: U. S. Census of Housing 1950

TABLE 6

OWNER AND RENTER OCCUPIED DWELLING UNITS, FOR STANDARD METROPOLITAN AREAS BY CONDITION AND PLUMBING FACILITIES

METRO- POLITAN AREA	TOTAL	PER CENT NOT DILAPIDATED					PER CENT DILAPIDATED			
		With priv. toilet and bath & hot running water	With private toilet & bath & only cold run. water	With hot or run. water, lacking priv. toilet or bath	Only cold water lacking priv. toilet or bath	No running water	TOTAL	With priv. bath & hot running water	Lacking hot water, priv. bath or toilet	No reported
Peoria	61,885	64.0	4.0	7.9	9.6	5.9	4,205	1.0	2.9	2.3
Evansville	40,785	62.8	5.1	8.1	9.9	4.8	3,360	1.6	5.9	1.8
Fort Wayne	47,170	74.9	6.6	6.4	5.4	3.2	1,810	.8	2.8	1.8
South Bend	50,910	74.4	5.3	5.3	6.0	2.7	2,105	1.0	2.9	2.3
Davenport, RI, Moline	58,445	66.5	3.0	9.6	7.9		2,570	.6	3.4	2.2
Rockford	38,850	65.4	9.5	5.1	6.9	5.5	2,105	.4	4.5	2.4

Source: U. S. Bureau of the Census, U. S. Census of Housing, 1950, Nonfarm Housing Characteristics (Washington, D. C.: U. S. Government Printing Office, 1952), Vol. II, Chapter 69, Table A-4 for respective metropolitan areas.

TABLE 7

OWNER OCCUPIED DWELLING UNITS, FOR STANDARD
METROPOLITAN AREAS BY CONDITION

METRO- POLITAN AREA	TOTAL UNITS	NOT DILAPIDATED		DILAPIDATED		NOT REPORTED	
		No.	Per Cent	No.	Per Cent	No.	Per Cent
Peoria	43,350	40,900	94.3	1,770	4.1	680	1.6
Evansville	26,135	25,040	95.8	730	2.8	365	1.4
Fort Wayne	33,785	32,395	95.9	900	2.7	490	1.4
South Bend	39,590	37,860	95.6	1,020	2.6	710	1.8
Davenport- R. I. - Moline	37,450	35,870	95.7	945	2.5	635	1.6
Rockford	24,950	23,490	94.1	945	3.7	515	2.0

TABLE 8

RENTER OCCUPIED DWELLING UNITS, FOR STANDARD
METROPOLITAN AREAS BY CONDITION

Peoria	24,010	20,985	87.4	2,435	10.1	590	2.5
Evansville	18,810	15,745	83.7	2,630	14.0	435	2.3
Fort Wayne	16,085	14,775	91.9	910	5.7	400	2.5
South Bend	14,695	13,050	88.8	1,085	7.4	560	3.8
Davenport- R. I. - Moline	24,975	22,575	90.3	1,625	6.5	775	3.1
Rockford	17,020	15,360	90.2	1,160	6.8	500	2.9

Source: U. S. Bureau of the Census, U. S. Census of Housing, 1950, Non-farm Housing Characteristics (Washington, D. C.: U. S. Government Printing Office, 1952), Vol. II, Chap. 69, Table A-4 for respective metropolitan areas.

TABLE 9

OWNER AND RENTER OCCUPIED DWELLING UNITS,
FOR STANDARD METROPOLITAN AREAS BY CONDITION

METRO- POLITAN AREA	TOTAL UNITS	NOT DILAPIDATED		DILAPIDATED		NOT REPORTED	
		No.	Per Cent	No.	Per Cent	No.	Per Cent
Peoria	67,360	61,885	91.8	4,205	6.2	1,270	1.9
Evansville	44,945	40,785	90.9	3,360	7.5	800	1.8
Fort Wayne	49,870	47,170	94.6	1,810	3.6	890	1.8
South Bend	54,280	50,910	93.8	2,105	3.9	1,270	2.3
Davenport, RI, Moline	62,425	58,445	93.6	2,570	4.1	1,410	2.2
Rockford	41,970	38,850	92.5	2,105	5.0	1,015	2.4

Source: U. S. Bureau of Census, U. S. Census of Housing, 1950, Nonfarm Housing Characteristics (Washington, D. C.: U. S. Government Printing Office, 1952), Vol. II, Chap. 69, Table A-4 for respective metropolitan areas.

TABLE 10
CENTRAL HEATING

METRO- POLITAN AREA	TOTAL UNITS	CENTRAL HEATING				NONCENTRAL HEATING				NOT	
		Piped Steam		Warm Air		Without Flue		or		REPORTED	
		No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Peoria	43,350	2,974	6.9	29,991	69.2	9,350	21.6	388	.9	369	.9
Evansville	26,135	1,178	4.5	15,496	59.3	7,914	30.3	1,207	4.6	340	1.3
Fort Wayne	33,785	2,200	6.5	23,764	70.3	6,978	20.7	426	1.3	417	1.2
South Bend	39,590	2,405	6.1	28,811	72.8	7,531	19.0	470	1.2	369	.9
Davenport, Ia., Moline	29,634	3,803	10.0	25,831	68.9	6,596	17.6	691	1.8	524	1.3
Rockford	19,384	4,313	10.2	25,311	60.3	8,120	19.3	835	1.9	3,390	8.0

Source: U. S. Bureau of the Census, U. S. Census of Housing, 1950, Nonfarm Housing Characteristics (Washington, D. C.: U. S. Government Printing Office, 1952), Vol. II, Chap. 69, Table A-4 for respective metropolitan areas

TABLE 11

OWNER AND RENTER OCCUPIED DWELLING UNITS, FOR STANDARD METROPOLITAN AREAS BY NUMBER OF PERSONS PER ROOM

METRO- POLITAN AREA	TOTAL UNITS	0.75 OR LESS			0.76 TO 1.00			1.01 OR MORE			NOT REPORTED	
		No.	Per Cent		No.	Per Cent		No.	Per Cent		No.	Per Cent
Peoria	67,360	39,975	59.3		17,460	25.9		9,175	13.6		750	1.1
Evansville	44,945	24,220	53.9		12,325	27.4		7,955	17.7		445	1.0
Fort Wayne	49,870	33,600	67.4		11,415	22.9		4,190	8.4		665	1.3
South Bend	54,285	34,780	64.1		13,465	24.8		5,390	9.9		650	1.2
Davenport, RI, Moline	62,425	38,150	61.1		15,465	24.7		7,745	12.4		1,065	1.7
Rockford	41,970	27,435	65.3		9,750	23.2		4,155	9.8		630	1.5

Source: U. S. Bureau of the Census, U. S. Census of Housing, 1950, Nonfarm Housing Characteristics (Washington, D. C.: U. S. Government Printing Office, 1952), Vol. II Chap. 69, Table A-7 for respective metropolitan areas.

TABLE 12

GROSS MONTHLY RENT OF RENTER OCCUPIED DWELLING UNITS
AS PERCENTAGE OF INCOME FOR STANDARD METROPOLITAN AREAS

METRO- POLITAN AREA	TOTAL UNITS	LESS THAN 10 PER CENT		10 TO 14 PER CENT		15 TO 19 PER CENT		20 TO 29 PER CENT		30 PER CENT OR MORE		NOT REPORTED	
		No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Peoria	24,010	2,795	11.6	4,710	19.6	4,315	18.0	4,175	17.4	3,560	14.8	4,455	18.6
Evansville	18,810	2,080	11.1	3,825	20.3	3,335	17.7	2,990	15.9	3,320	17.6	3,260	17.3
Fort Wayne	16,085	1,255	7.8	3,350	20.8	3,150	19.6	3,225	20.0	2,530	15.7	2,575	16.0
South Bend	14,695	2,045	13.9	3,245	22.1	2,575	17.5	2,105	14.3	1,590	10.8	3,135	21.3
Davenport, RI, Moline	24,975	3,060	12.2	5,485	21.9	4,785	19.1	4,040	16.1	3,370	13.4	4,235	16.9
Rockford	17,020	1,705	10.0	3,905	22.9	3,200	18.8	2,840	16.6	2,265	13.3	3,105	18.2

Source: U. S. Bureau of the Census, U. S. Census of Housing, 1950, Nonfarm Housing, Characteristics (Washington, D. C.: U. S. Government Printing Office, 1952), Vol. II, Chap. 69, Table A-7 for respective metropolitan areas.

TABLE 13

VALUE-INCOME RATIO OF OWNER OCCUPIED DWELLING UNITS IN ONE UNIT
STRUCTURES FOR STANDARD METROPOLITAN AREAS

METRO- POLITAN AREA	TOTAL UNITS	LESS THAN				1.0 TO 1.4				1.5 TO 1.9				2.0 TO 2.9				3.0 OR MORE				NOT AVAILABLE	
		No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Peoria	37,095	4,225	11.3	5,810	15.6	5,910	15.9	7,975	21.4	7,570	20.2	5,605	15.1										
Evansville	22,390	2,830	12.6	4,175	18.6	3,520	15.7	4,765	21.3	4,110	18.3	2,990	13.4										
Fort Wayne	28,835	2,040	7.1	4,600	16.0	4,890	16.9	7,275	25.2	5,935	20.6	4,095	14.2										
South Bend	39,590	4,285	10.8	6,820	17.2	6,455	16.3	6,875	17.4	4,930	12.4	5,335	13.5										
Davenport, RI, Moline	30,685	2,325	7.5	3,835	12.4	4,590	14.9	7,400	24.1	7,785	25.3	4,750	15.4										
Rockford	20,335	1,285	6.3	2,600	12.7	3,825	18.8	4,990	24.5	4,705	23.1	3,730	18.3										

Source: U. S. Bureau of the Census, U. S. Census of Housing, 1950, Nonfarm Housing Characteristics (Washington, D. C.: U. S. Government Printing Office, 1952, Vol. II., Chap. 69, Table A-7 for respective metropolitan areas).

TABLE 14

VALUE OF OWNER OCCUPIED DWELLING UNITS IN ONE UNIT
STRUCTURES FOR STANDARD METROPOLITAN AREAS

METRO- POLITAN AREA	TOTAL UNITS	LESS THAN \$2,000		\$2,000 TO \$2,999		\$3,000 TO \$3,999		\$4,000 TO \$4,999		\$5,000 TO	
		No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Peoria	37,095	1,055	2.8	1,640	4.4	2,550	6.9	2,860	7.7	3,440	9.3
Evansville	22,390	795	3.6	1,170	5.2	2,340	10.5	2,420	10.8	2,430	10.8
Fort Wayne	28,835	460	1.6	730	2.5	1,155	4.0	1,910	6.6	2,575	8.9
South Bend	34,700	715	2.1	900	2.6	1,750	5.0	2,545	7.3	3,245	9.4
Davenport, RI, Moline	30,685	655	2.1	700	2.2	1,075	3.5	1,525	4.9	2,130	6.9
Rockford	20,335	370	1.8	500	2.4	750	3.6	935	4.5	1,400	6.8

TABLE 14 (Continued)

VALUE OF OWNER OCCUPIED DWELLING UNITS IN ONE UNIT
STRUCTURES FOR STANDARD METROPOLITAN AREAS

	\$6,000 TO \$7,499		\$7,500 TO \$9,999		\$10,000 TO \$14,999		\$15,000 TO \$19,999		\$20,000 OR MORE		NOT REPORTED	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Peoria	5,660	15.3	6,880	18.6	7,755	20.9	2,480	6.7	1,540	4.2	1,235	3.5
Evansville	4,470	20.0	3,935	17.6	2,790	12.5	875	3.9	660	2.9	505	2.3
Fort Wayne	5,350	18.6	7,095	24.6	6,405	22.2	1,475	5.1	835	2.9	845	2.9
South Bend	6,940	20.0	8,830	25.4	6,130	17.7	1,520	4.4	915	2.6	1,210	3.5
Davenport, RI, Moline	4,315	14.0	6,470	21.0	9,340	30.4	2,270	7.3	1,250	4.0	955	3.1
Rockford	2,460	12.0	4,430	21.7	5,935	29.1	1,710	8.4	1,135	5.5	710	3.4

Source: U. S. Bureau of the Census, U. S. Census of Housing, 1950, Nonfarm Housing Characteristics (Washington, D. C., U. S. Government Printing Office, 1952), Volume II, Chapter 69, Table A-7 for respective metropolitan areas.

TABLE 15

NUMBER OF PERSONS PER UNIT IN OWNER AND RENTER OCCUPIED
DWELLING UNITS FOR STANDARD METROPOLITAN AREAS

METRO- POLITAN AREA	TOTAL UNITS	1 PERSON		2 PERSONS		3 PERSONS		
		No.	Per Cent	No.	Per Cent	No.	Per Cent	
Peoria	67,360	5,890	3.7	21,255	31.6	16,065	23.8	
Evansville	44,945	3,720	8.3	13,945	31.0	11,175	24.9	
Fort Wayne	49,870	4,330	8.7	16,075	32.2	12,080	24.2	
South Bend	54,285	3,615	6.7	16,645	30.7	13,255	24.4	
Davenport- R. I. - Moline	62,425	5,130	8.2	20,630	33.0	14,770	23.6	
Rockford	41,970	3,150	7.5	13,355	31.8	10,170	24.2	
----- 4 PERSONS ----- 5 PERSONS ----- 6 PERSONS ----- 7 PERSONS OR MORE -----								
METRO- POLITAN AREA	No.	Per Cent	No.	Per Cent	Per Cent	No.	Per Cent	
Peoria	12,715	18.9	6,395	9.5	2,735	4.1	2,305	3.4
Evansville	8,200	18.2	4,330	9.6	1,955	4.3	1,620	3.6
Fort Wayne	9,025	18.1	4,695	9.4	2,135	4.3	1,530	3.1
South Bend	11,040	20.3	5,155	9.5	2,400	4.4	2,175	4.0
Davenport- R. I. - Moline	11,445	18.3	5,700	9.1	2,735	4.3	2,015	3.2
Rockford	8,175	19.4	4,020	9.5	1,745	4.1	1,335	3.1

Source: U. S. Bureau of the Census, U. S. Census of Housing, 1950, Non-farm Housing Characteristics (Washington, D. C.: U. S. Government Printing Office, 1952), Vol. II, Chap. 69, Table A-7 for respective metropolitan areas.

TABLE 16
GROSS MONTHLY RENT OF RENTER OCCUPIED DWELLINGS
FOR STANDARD METROPOLITAN AREAS

METRO- POLITAN AREA	TOTAL UNITS	No.	LESS THAN \$ 10		\$ 10-14		\$ 15-\$19		\$ 20-\$24		\$ 25-\$29		\$ 30-\$34	
			Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.
Peoria	24,010	170	.7	355	1.5	635	2.6	1,465	6.1	1,695	7.1	2,205	9.2	
Evansville	18,810	120	.6	395	2.1	815	4.3	1,445	7.7	1,980	10.5	2,375	12.6	
Fort Wayne	16,085	10	.1	65	.4	145	.9	395	2.5	640	4.0	1,235	7.7	
South Bend	14,695	10	.07	90	.6	160	1.1	465	3.2	675	4.6	840	5.7	
Davenport,	24,975	85	.3	190	.7	390	1.5	910	3.6	1,495	5.9	2,335	9.3	
RI, Moline														
Rockford	17,020	30	.1	70	.4	145	.8	520	3.0	760	4.4	1,100	6.4	
METRO- POLITAN AREA	\$35-\$39			\$40-\$49		\$50-\$59		\$60-\$74		\$75-\$99		\$100 OR MORE	RENT FREE OR NOT REPORTED	
Peoria	2,350	9.8		4,855	20.2	3,330	13.9	2,770	11.5	1,235	5.1	485	2.0	2,460
Evansville	2,035	10.8		2,990	15.9	2,610	13.9	1,515	8.1	735	3.9	205	1.1	1,590
Fort Wayne	1,445	9.0		3,710	23.1	3,235	20.1	2,415	15.0	1,095	6.8	265	1.6	1,430
South Bend	1,225	8.3		3,585	24.4	2,625	17.9	2,030	13.8	865	5.9	195	1.3	1,930
Davenport	2,375	9.5		5,545	22.2	4,465	17.8	3,125	12.5	1,300	5.2	370	1.4	2,390
RI, Moline														
Rockford	1,590	9.3		3,965	23.2	3,710	21.7	2,520	14.8	795	4.6	220	1.2	1,595

Source: U. S. Bureau of the Census, U. S. Census of Housing, 1950, Nonfarm Housing Characteristics (Washington, D. C.: U. S. Government Printing Office, 1952), Vol. II, Chap. 69, Table A-3 for respective metropolitan areas.

The dollar value of rent (Table 16) shows that the Peoria Area has a substantial number of low rent units as compared with other cities of its size. Of the cities shown Peoria ranks second highest in the proportion of units in the six rent levels from \$10 per month to \$40 per month. From \$40 to \$100 levels the area ranks relatively low, however in the \$100 per month or more category, Peoria has the highest proportion of all the cities compared.

Table 14 shows nothing significantly high or low in the ratio of value of dwelling to yearly income except that the area leans toward value-income ratio above 2 as do most sizeable cities. This table does point out, as in rental housing, the even distribution characteristics of the area. As in most cities, the highest percentage of houses are valued between \$10,000 and \$15,000 (Table 14). Having 65.7 percent of its owner-occupied dwellings valued above \$6000, the area ranks next to lowest in this respect; the top being 76.7% and the bottom 56.9%.

From the census data, then, it may be concluded that with the exception of the relatively high delapidation ratio and the attendant problems, Peoria's housing situation may be regarded as being fairly typical for a mid-west city of its size. Relating Peoria with other similar cities results in at least as many favorable comparisons as unfavorable.

PUBLIC HOUSING: The need for public housing construction in the Peoria Area was recognized in 1934 when the city was chosen as one of sixty cities for a "real property" inventory by the Federal Government. This survey indicated an urgent necessity of better housing. The Peoria Housing Authority was formally organized in 1938 and had the initial loan contract of \$2,559,000 approved in the same year.

The Warner Homes section, located on the near south side of the city, consists of 487 units, was ready for occupancy on June 16, 1941. Harrison Homes, located on the far south side of the city, was opened in October of the same year, bringing the total number of units to 1,093. In early 1943, a third project was opened; an addition to Harrison Homes, consisting of 240 units. A second addition to Harrison Homes, in 1952, brought the total in this project to 846 units. At the present time, a 360 unit project (Taft Homes) on the near north side is nearing completion. This completion will make a grand total of 1683 low-cost public housing units in the city.

A statement of policy concerning rents and income limits issued by the Peoria Housing Authority is included in the Appendix, Figure A11-1.

In 1951, the average gross rent per month in the housing units was \$36.51, while the average family income at the time of admission was \$2,064. In 1952 the average rent was \$37.52. The housing authority states that these figures have not been increased significantly during the past year and that total occupancy has been maintained since the completion of the units. The merits of public housing as a remedy for housing problems, will not be argued here. These units obviously perform a vital function.

RESIDENTIAL, COST OF CONSTRUCTION: The cost of residential building in the area does not seem to be prohibitive to the average wage earner. A three bedroom prefabricated house, with asbestos siding, is sold by a Pekin realtor for \$7800.* The same home with cedar siding (\$150 more than asbestos), and a more expensive heating system (\$400 more) sells in Rockford, Illinois for \$9850. The cost per square foot for construction of this house in the Peoria area is \$9.13

A new, three bedroom brick house with attached garage, aluminum window fixtures, hip roof, gas heat, garbage disposal, utility room, but without basement is priced at \$13,150.

RESIDENTIAL, LAND COST AND AVAILABILITY: There are relatively few desirable lots within the corporate city limits of Peoria. The area available for expansion outside the limits is, however, unlimited. Nearly all the recent Peoria County residential development has been toward the north and west of the city. It is in this area that the most desirable plots lie. In Tazewell County, notable expansion has taken place north of Pekin and between East Peoria and Washington.

A popular price for residential building lots in the Peoria Area would be between \$1400 and \$2000, although lots in a recently divided plot of land in the south-west side of the City of Peoria, sold for \$850 each. Typical of subdivision prices in both Tazewell and Peoria Counties is a lot measuring 78' x 120' with gas, water and electrical service advertised at \$1500.

CONSTRUCTION INDUSTRY: The 1950 Census of Population shows 3308 men employed in the construction trade in the Peoria Metropolitan Area; this figure is low, however, since it is an average for the year. The 1951 County Business Patterns indicates that 4114 persons were employed in mid-March, 1951. The data from this publication are listed below.

Table 17
CONSTRUCTION INDUSTRY SIZE CHARACTERISTICS

	Mid-	\$1000	Total Reporting Units	Number Employed						
	March	Taxable								
	No. Empl.	Payrolls Jan-Mar		0-3	4-7	8-19	20-	50-	100-	250-
Contract							49	99	249	499
Construction	4114	3594	524	290	131	65	28	6	2	2
General Contractors Bldg.	1744	1492	135	70	32	20	5	3	1	2
General Contractors										
Other	386	324	26	12	5	2	5	1	1	
Special Trades	1984	1777	365	208	94	43	18	2		

* John B. Lindsay, District Sales Representative, National Homes Corporation, LaFayette, Indiana.

As Tazewell County has no zoning ordinance in operation, registration of new building is not required nor are building permits issued to builders. For this reason, information concerning building activity in the county is virtually unobtainable. The information is available for Peoria County, however, since both the county and most of the incorporated places require building permits. The table below is a combination of figures taken from New Dwelling Units Authorized by Local Building Permits, issued by the U. S. Department of Labor, Bureau of Labor Statistics, and figures released by the Peoria County Zoning Board.

Table 18

NUMBER OF DWELLING UNITS AUTHORIZED
FOR SELECTED CITIES

As of Jan. 1, 1954

	Houses Built Before Jan. 1, 1950	Houses Built After Jan 1, 1950	Total Houses	% Houses Built After Jan. 1, 1950
Peoria County	50,524	4,768	55,292	8.6
Evansville	48,279	2,603	50,882	5.1
Indianapolis	169,596	19,528	189,124	10.3
South Bend	58,007	8,633	66,640	12.9
Decatur	23,684	2,132	25,816	8.2

Sources for this and the following Table: New Dwelling Units Authorized by Local Building Permits, Bureau of Labor Statistics; 1950 Census of Housing.

The preceding table indicates the relative recent residential building activity of Peoria County as compared to several other mid-western cities, for which information was available.

The table below provides a breakdown of the residential construction activity within the Peoria County.

Table 19

NUMBER OF DWELLING UNITS AUTHORIZED
FOR LOCAL CITIES AND FOR PEORIA COUNTY

	1950	1951	1952	1953	Jan-June 1954
Peoria County*	747	720	637	510	246
Bartonville	6	39	10	18	

Table 19 (cont'd)

	1950	1951	1952	1953	Jan-June 1954
N. Chillicothe	5	7	3	3	
Peoria	597	670**	190	498	
Peoria Heights	33	27	29	19	
Total	1388	1463	869	1048	

* Outside incorporated cities.

** Includes Public Housing.

A somewhat more complete indication of local building activity is the following table showing the number and value of building permits for all types of construction issued in Peoria County, including the City of Peoria. There are no data of this type in Tazewell County.

Table 20

PEORIA COUNTY BUILDING PERMITS

Year	Number Permits	Value
1945	924	\$ 2,213,202
1947	1769	4,354,182
1949	1430	5,810,913
1951	1166	10,937,417
1953	2223	18,122,661

COST OF INDUSTRIAL CONSTRUCTION

The cost of industrial or factory-type building is dependent upon such a large number of variables that it is virtually impossible to estimate it within any closely defined limits. As an example, a builder of metal commercial and industrial buildings estimates the cost of a simple "shell" at \$2.50 per square foot.* On the other hand, a brick building recently built by one of the larger manufacturing firms in the area had a square foot cost of over sixteen dollars. Local architects estimate that building costs in the Peoria Area parallel very closely those of Chicago, one of the higher cost areas in the nation.

The final cost of a completed residence or commercial building, also depends on the cost of the land upon which it is built. Industrial land cost comparisons between various cities are impossible to make as there are so many variables influencing the cost. However, as one of the cost determinants is the availability of land, it is important to refer to this question as treated in Chapter 2. Associated with and actually determining land availability and use, (at least in Peoria County) is the zoning ordinance, which is discussed next.

* Illinois Building Service, Inc.

PEORIA COUNTY ZONING ORDINANCE: The Zoning Ordinance of Peoria County is enforced by the County Zoning Enforcing Officer appointed by the Peoria County Board of Supervisors. This ordinance which was adopted in 1948 and revised in 1953 was designed to perform the following functions:**

- (1) Dividing the unincorporated part of Peoria County into districts.
- (2) Regulating and restricting the location and use of buildings, structures, and land for trade, industry, residence and other use within those districts.
- (3) Regulating and restricting the intensity of such uses.
- (4) Specifying minimum lot sizes, setbacks and sideyards.
- (5) Specifying building heights.
- (6) Requiring approved water supply and sewage facilities.
- (7) Providing for a Board of Appeals.
- (8) Providing for the change and amendment of such regulation and boundaries of districts.
- (9) Providing for the enforcement of and providing for penalties for the violations of the provisions hereof, pursuant to "An Act in Relation to County Zoning" passed by the General Assembly of the State of Illinois and enacted into law June 28, 1935, also, to prescribe rules and regulations for the preparation and approval of maps, plats and subdivisions, pursuant to the powers invested in County Boards as added by act of the General Assembly approved July 28, 1945.

Land under this ordinance is divided into the following districts:

"A" Agricultural District

"B" County Home District

"C" Residential District

"D7. 1a" Commercial District

"D7. 1b" Commercial District (Amusements)

"E8. 1a" Light industrial (Bakeries, Billboards,
Ice Plants, etc.)

"E8. 1b" Light industrial (Auto body, monument works,
Elec. Power Plants)

** Zoning Ordinance, Peoria County, Illinois

"F" Heavy Industrial

It must suffice here to but point out the general objectives and construction classifications of the County Zoning Ordinance. The geography of the ordinance is treated in Chapter 2, pp. 64, containing maps and other descriptions of the land zoned for industrial purposes (classification "E8.1a", "E8.1b" and "F"). Complete details of this zoning ordinance are available in pamphlet form upon request to the Peoria County Zoning Enforcement Officer.

The only other zoning ordinance currently in force in the Tazewell-Peoria County area is that of the City of Peoria. Its provisions are quite similar to those invoked by the county ordinance. Although it is not feasible to deal with the city's zoning ordinance in detail, a general picture of the actual area zoned for industrial purposes may be had by referring to maps 22, 5; pp. 65 and 81. More specific information on the city ordinance may be obtained from the city Building Commissioner.

Figure A11-1

Peoria Housing Authority
Peoria, Illinois

A STATEMENT OF POLICY ON RENTS and INCOME LIMITS

In order to avoid any possible misunderstanding regarding the "Rental Policies" of the Peoria Housing Authority, said policies are being restated below for the information, convenience, and guidance of our Tenants.

1 - THE RULES AND REGULATIONS prescribed by the Public Housing Administration pursuant to the United States Housing Authority's Act of 1937 as amended, establishing the low-rent Public Housing program, provide that the incomes of families living in PHA-Aided homes, shall be reexamined at least once each year. The terms of the "Dwelling Lease" also provide for such reexamination.

2 - RENTS ARE BASED entirely on family income for all eligible Tenants except as otherwise indicated below. Each family is assigned to the size of home needed, based on number of persons, age and sex.

3 - REVISED SCHEDULE of RENTS and INCOME LIMITS EFFECTIVE APRIL 1, 1954

Monthly Gross Rents	Family Annual Net Income	Monthly Gross Rents	Family Annual Net Income	Monthly Gross Rents	Family Annual Net Income
\$15	Up to \$900	\$33	1921 - 1980	\$51	3001 - 3060
16	901 - 960	34	1981 - 2040	52	3061 - 3120
17	961 - 1020	35	2041 - 2100	53	3121 - 3180
18	1021 - 1080	36	2101 - 2160	54	3181 - 3240
19	1081 - 1140	37	2161 - 2220	55	3241 - 3300
20	1141 - 1200	38	2221 - 2280	56	3301 - 3360
21	1201 - 1260	39	2281 - 2340	57	3361 - 3420
22	1261 - 1320	40	2341 - 2400	58	3421 - 3480
23	1321 - 1380	41	2401 - 2460	59	3481 - 3540
24	1381 - 1440	42	2461 - 2520	* 60	3541 - 3600
25	1441 - 1500	43	2521 - 2580	61	3601 - 3660
26	1501 - 1560	44	2581 - 2640	* 62	3661 - 3720
27	1561 - 1620	45	2641 - 2700	63	3721 - 3780
28	1621 - 1680	46	2701 - 2760	* 64	3781 - 3840
29	1681 - 1740	47	2761 - 2820	65	3841 - 3900
30	1741 - 1800	48	2821 - 2880	* 66	3901 - 3960
31	1801 - 1860	49	2881 - 2940	67	3961 - 4020
32	1861 - 1920	50	2941 - 3000	* 68	4021 - 4100

* Maximum Rents have been reduced from \$70 for any size home to: \$68 for 5 bedrooms; \$66 for 4 bedrooms; \$64 for 3 bedrooms; \$62 for 2 bedrooms; and \$60 for 1 bedroom.

Figure A11-1 (cont'd)

ALL OF THE ABOVE RENTS INCLUDE HEAT, WATER, ELECTRICITY, AND GAS, EXCEPT THOSE IN THE HARRISON HOMES ADDITION, (Apts. 607 to 846) WHERE RENTS ARE ESTABLISHED AT \$5.00 PER MONTH LOWER FOR EACH RENT BRACKET BECAUSE HEAT IS NOT FURNISHED AND TENANTS MUST SUPPLY THEIR OWN COAL. Rents are the same for each income bracket regardless of size of home.

FLAT RENTS based on the number of persons instead of income, have been established for families receiving a major portion of their total family income from Public Assistance (Relief, Blind, and Old Age Pensions, Aid to Dependent Children etc.)

2 Persons	\$24	4 Persons	\$30	6 Persons	\$40
3 Persons	\$26	5 Persons	\$34	7 or more "	\$44

NET ANNUAL INCOME will be determined by deducting from total gross family income any of the following items:

- A. \$100 for each minor (unmarried person under age 21)
- B. Allowances for Child Support if indicated in divorce papers and satisfactory evidence is furnished that same is actually being paid.
- C. Reasonable allowance actually paid up to a maximum of \$10 per week may be deducted for care of children, aged or incapacitated member of family to permit employment of sole wage earner only.
- D. Social Security, union dues and special occupational expense for car used in work or meals and lodging in connection with work out of city.
- E. Military Service away from home \$50 per Mo. (Overseas \$75)
- F. 100% of fully verified business expense which is allowable.

MAXIMUM ANNUAL NET FAMILY INCOME LIMITS

<u>Size of family</u>	<u>For Admission</u>	<u>Continued Occupancy</u>
2 Persons	\$3000	\$3700
3 or more Persons	\$3300	\$4100

4 - RENTS ARE DUE on the first of the month in advance. Any other charges for services, property damage, etc. are due on the date billed. If rent and any other charges due on the first are not paid on or before the 6th, a \$1.00 service charge and penalty will be added except in those cases where "Extension of Time" is granted by the Manager for good and sufficient reasons. If definite arrangements satisfactory to the Management are not made for full payment of all amounts due, a "Landlord's Five-Day Notice" will be served.

5 - RENT ADJUSTMENTS - The terms of your Dwelling Lease now require that you report all changes (large or small) in family income from any source. In the future, you need only report a "substantial change" amounting to approximately \$10 per week. Rent will be adjusted up or down if change in annual in-

come amounts to \$500 or more. Exception: Families receiving more than one-half of their income from public assistance, such as Relief, ADC, OAA, etc., will pay the established flat rent which is based on the number of persons in the family, instead of income. Such families are to continue reporting promptly any changes in the number of persons in the family and rents will be adjusted up or down according to the number of persons. Likewise, rents will be adjusted to actual income basis for families going off flat rent basis due to change in the amount of public assistance or its discontinuance.

No adjustment is to be considered for temporary loss of income due to unemployment, sickness, accident, etc., unless person responsible for the support of a family is off at least 30 days. If the person who is responsible for the support of the family has a serious accident, or should require an operation or special health treatment, which would necessitate being off work for at least 30 days, we will consider reduction in rent on the first of the following month after its occurrence, if satisfactory information is furnished promptly and the decrease is \$500 or more per year.

6 - DETERMINATION OF TOTAL FAMILY INCOME is based primarily on current earnings and/or income from all other sources, if any. However, family income for the past year, including compensation for overtime, bonuses, commissions, tips, etc., is also considered in arriving at the estimated annual income from which rent is determined.

7 - CHANGE IN FAMILY COMPOSITION - It has been our practice in the past to adjust rents up or down when there was a change in family composition (child born, or leaving home to get married or employment, military service, etc.) In the future, no rent adjustments will be made when a child is born into the home or leaves the home until the next annual re-examination date, except for families paying flat rents, as indicated in Section 5 above. This will eliminate the necessity of Tenant reporting such changes; also much extra work for our staff. We will continue to make rent adjustments; however, when there is a change in family composition due to a new family head, which may be caused from death, separation, divorce, etc., the Authority's policy has been changed to permit a family to remain in the home where it has been reduced to one person.

8 - OCCUPANCY - No one is allowed to live in your home except those persons whose names appear on your Lease. For example, a husband supposedly separated, or a relative (child, mother, father, mother-in-law, etc.) cannot come to live with you without full advance knowledge and prior approval of the Management.

Additional information is contained in your DWELLING LEASE AND RESIDENT HANDBOOK. If there is anything about this STATEMENT OF POLICY that is not perfectly clear to you, please ask about it at the Management Office. Thank you.

Peoria Housing Authority
ELMER JOLLY
Executive Director

March 1, 1954.

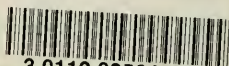








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